AMERICAN BEE JOURNAL

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November 1954 Vol. 94 No. 11

6

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THE AMERICAN BEE JOURNAL

Vol. 94, No. 11 HAMILTON, ILLINOIS November, 1954

Editor — G. H. Cale

Associate Editors — M. G. Dadant, Roy A. Grout

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Published monthly at Hamilton, Illinois. Entered as second-class matter at the Post Office, Hamilton, Illinois. In the United States, Canada and Mexico, $2.00 a year; two years $3.50; three years $5.00. Foreign $2.50 a year; two years $4.50; three years $6.50. Subscription stopped at expiration date printed on wrapper. Available on microfilm at moderate prices by writing to University Microfilms, Ann Arbor, Michigan.

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OUR COVER PICTURE

Richard F. Trump, Ames, Iowa, sends this month's photograph of a worker bee searching out the nectar on the blossoms of birdsfoot trefoil. Frank C. Pellett made the first Iowa planting of this legume in 1938. It is a fine-stemmed legume especially desirable for use in permanent pastures as a forage crop. It will grow on poor soils and apparently is a good nectar source in the northern sections of this country.

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ALL AROUND THE BEE YARD

G. H. CALE

When it comes to enthusiasm among beekeepers the spontaneous expression of live interest more often comes from the small beekeepers than from the big ones. The big ones seem to be too much occupied with making a living from bees and honey to be much concerned with the bees or their problems. So they often miss the boat in knowing about some change in their established ways that might, if they knew about how to apply the new concepts, not only make their occupation more profitable, but more enjoyable.

Since these typewriter keys last clicked out the monthly quota of thought for this department, I have been around a bit. At southern Wisconsin meetings most of the larger producers reported only a part of a crop. In Illinois and Iowa the crop also is generally disappointing. Although the total crop for the country is given as only about ten per cent less than last year, it does not reveal the true situation. Likely white honey is very short and those who do have suitable table grade honey should not sacrifice it for a low price.

This is the year when we have to go it alone in our now well established October honey selling campaign and Honey Week. With a short crop many producer-distributors may not have done much to tie their sales efforts into the activities of the Institute and the Federation to make October a build-up publicity period to keep honey on the move until the next season comes around. It may have been too easy to sell honey. So we may have lost some of the future value of honey publicity just because we did not feel the present need to make much effort during October. After all, we are not just trying to sell a crop; we are trying to make the buyer permanently conscious of honey and its everlasting worth.

Robert Banker, in October (page 385) tells how to make up nucs, or separate units for two-queen operation, by the use of excluders. Henry Schaefer in Wisconsin uses the same plan. Bees are shaken off two combs of brood and a comb of honey and these combs replaced with empty drawn combs. Then the excluder is placed on at the top, a new queen given, and the bees work up through the excluder so that in a day or two the excluder may be removed and replaced with a double screen with back entrance plugged with grass, and so we have our new unit. Good plan and easy.

We tried terramycin (TPF 25) this past spring as a disease preventive with package bees, using the same dosage of two grams, as a dust, as is often used for fully developed colonies. At the time of application the package colonies had only a small amount of brood and bees. It was much too heavy a dose and many of the colonies lost bees and brood. Terramycin in overdose is lethal to both brood and bees. Perhaps the milder forms (less amounts of active terramycin) as in TM 10 or TM 5 would be safer to use. It might be still better to use streptomycin sulphate which seems to be quite effective for EFB but of no value for AFB. Terramycin is a good preventive for both diseases.

Carl Teasley, in October (page 377) says he tried joining bees by the drifting method in the early part of the honeyflow. Hives were close together in pairs for three days. Then the weaker colonies were moved to another location over two miles away in the middle of the day. The flying bees, on return from the field, thus increased the populations of the colonies left behind. The strengthened hives made six supers of sourwood honey while the regular colonies made only three. In addition the colonies which were moved away made a super average. Looks like his net gain was about a half super but that much gain in sourwood honey might mean a dollar or two more profit.

We had to "go" all the way to Brazil to learn (through Dr. Munro) that experiments on the acclimatization of stingless bees are being conducted by our U.S.D.A. Bee Culture office. Appears that these little fellows are very useful as pollinators. Dr. Bohart in Utah is testing them in the pollination of plants grown in greenhouses. Seems like we have to ferret out all that is going on in apicultural research in this country. The English and Europeans are not so secretive.

In years past all the steps and results of field trials and research were reported so that the interest and cooperation of the everyday beekeeper was really something. As it is now, we learn what is going on only when someone chooses to give us the information and usually only after an end point is reached. We seldom know what is tried and found to fail. That is often interesting, too.

S WE SEE IT

EDITORIAL

A Situation that Needs Correcting . . .

In the October issue of The American Bee Journal, Dr. Eva Crane listed as a strong point of beekeeping in England and other European countries, their knowledge about beekeeping developments in other countries and their receptiveness to ideas which do not originate within their own country. In sharp contrast, Dr. Crane listed as a weak point of American beekeeping, the comparative ignorance among beekeepers about developments outside their own country, and about research work in general.

Why should such a contrast in beekeeping exist? Are the bee journals accountable for this circumstance?

We do not think so. Although no bee journal regards itself as perfect, its task is to give the most it can to its readers for the price of a subscription. While the average bee journal subscriber is a relatively small beekeeper, it is true that he regards beekeeping from a fairly well established commercial aspect. And another large block of subscribers are the so-called commercial beekeepers. They want to know the practical ways to do things to make beekeeping more profitable for them. Because of time and circumstances, they do not interest themselves generally in developments and research outside their own country.

Probably the greatest contributing factor to this contrast in beekeeping is the large area of America which results in long distances and a sparsely scattered population of beekeepers. And there doesn't seem to be anything that can be done about that.

So, while we come to the conclusion that this contrast largely developed as a natural consequence of different circumstances, we still should deplore the truth that American beekeepers are comparatively ignorant about developments outside their own country, and about research in general. Individuals, associations, periodicals and institutions should do what they can from time to time to correct this situation. In so doing, nothing would be lost and there is much that may be gained.

Read, Learn and Inwardly Digest . . .

So says an editorial title in the British Bee Journal for May 13. Beekeepers have said they think far too many books have been published on bees and beekeeping in the past ten to fifteen years. But that is not a well taken criticism. There may have been a surplus of books of general or popular interest but there will never be too many that reveal our advances in knowledge about bees and their care.

Books from England have been particularly splendid and should be studied by all of us. "The Behavior and Social Life of Honeybees" by Ribbands, "The World of the Honeybee" by Butler, "The Dancing Bees" by Karl von Frisch, and "The Pollen Loads of the Honeybee" by Dorothy Hodges are such as to open a new world about bees. Any of the facts these researchers give may in time completely alter the way we keep bees.

Our Honey Market . . .

There are about 163,000,000 people in the United States. According to Wheeler McMillan of the Farm Chemurgic Council our people are well fed and strong, productive and rich. No other great people has survived as a nation for more than a century and a half without the experience of a single famine. No other nation has ever been so well fed as to be compelled to recognize that one of the wide spread medical problems is obesity.

Where are these people of ours? In cities and towns. Now one farm worker produces enough food for more than 15 other people. One man hour of farm work now produces more than $2\frac{1}{2}$ times as much as it did in 1914. Since our people are so largely in cities and towns there is our honey market. Our people are alive to the values of natural foods and to the taste of what they eat and in these two particulars honey has no peer in all the nation's foods. It is not honey that fails us it is ourselves.

Honey for Bakery Use . . .

Last Spring, officers of The American Beekeeping Federation received, and later adopted, a very timely suggestion on how to promote the use of honey in baking. As a result of this suggestion, meetings of bakery representatives and commercial honey suppliers with Dr. J. W. White of the Eastern Regional Research Branch, Agricultural Research Service, are being scheduled in several large cities across the country. These meetings are being scheduled by Robert Banker, Cannon Falls, Minnesota who is Secretary of the Federation. The time for these meetings will be arranged so that Dr. White can attend several on a trip to save expenses which are being paid by the U. S. Department of Agriculture.

It has been stated, and several experiences tend to substantiate the claim, that the bakeries and other commercial users could profitably use all the honey produced in the U. S. every year.

We commend the Federation on this project. If you are interested in supplying honey to bakeries and wish to sponsor a bakery meeting, please contact Mr. Banker.

Panel for November

Raise Honey to Its Rightful Level

Robert Banker

Panel Editor

Secretary-Treasurer
American Beekeeping Federation
Cannon Falls, Minnesota

Are You Selling Your Industry for a "Dollar"?

by M. H. Haydak and C. D. Floyd
Minnesota

The American Beekeeping Federation is the official mouthpiece of the American beekeeper. The Federation brings together the thoughts and feelings of all its members to formulate a program which is a composite of the desires of all segments equally represented. Included are the state and local associations, the Honey Institute, the supply manufacturers, the packers, the professional beekeepers, teachers, research men, etc., and several hundred small and large individual beekeepers.

As you read this, have you asked yourself, where do I fit into this? Don't answer too soon until you read further. It is probably a natural impulse to ask, "What will I gain by joining the Federation?"

The value to be gained from membership in the Federation and in your Beekeeper's Association is not obtained by what one can get out of this membership, but rather by what one can contribute through his membership in the form of ideas which may be worked on and elaborated by other members. In other words, for a successful Federation, it is team-work that counts with every local association on the team pulling its fair load.

A short time ago, a beekeeper was heard to explain that most of our beekeepers in this country are not interested in learning more about the life of the bee or newer methods of beekeeping. It was claimed that our beekeepers' only interest was in getting more money for the honey they produced. In other words, their interests lay solely in "almighty dollar" and they were not interested in reading or listening to lectures. Do you think that such an explanation is correct?

There are a great many challenging topics suitable for discussions at beekeepers' meetings, such as, improvement in methods of management, a closer study of the life of the bee, how can honey consumption be increased, and what should we do to streamline marketing procedures? If every beekeeper would contribute the best of his knowledge to answering these many questions, support for the Federation and for our local associations would be no longer lacking.

If one assumes "the dollar" is the key to the question of whether beekeepers will show an interest in their association or not, one would be forced to believe beekeepers would be very eager to join with their fellow beekeepers in an effort to promote and advertise the honey they produce.

In the American Beekeeping Federation and in your state association, there exists a beautiful framework for organized effort in any phase of beekeeping a beekeeper might choose. These organizations should be guaranteed the support of every beekeeper big or small, all can contribute with ideas to aid our industry. Many of our hobby beekeepers are well trained in specific phases of business, would and can contribute a great deal to our industry. Farmers who keep a few hives of bees along with their farming operation may be our most ardent supporters on the question of pollination.

The "stepping stone" that leads to a strong Federation is of course, aggressive local association activity which, when grouped at the state level, provides a solid foundation for the Federation.

Strong local and State association activities may of course lean toward the Federation for direction. When it is necessary to seek protection for our industry, this is done through the services of our Federation committees which are able to gain hearings before the highest authorities.

"Our beekeepers need a strong Federation and our Federation needs all beekeepers."

"Organization"

by H. M. Krebs
California

"In Organization There is Strength" has been an adage for hundreds of years. Beekeepers either never heard of it or else didn't know

how to go about organizing until recently. I well remember the days when a beekeeper was suspicious of his neighbor, no matter how good the neighbor's intentions, and didn't care to even talk with another bee man for fear he would learn some of his secrets. In case organization was mentioned, he would shy away as if from a plague and declare he had always gotten along without any help and could continue to do so.

Did you ever break a match stick? Easy wasn't it? But did you ever try tieing twenty or thirty of them together and then break them all at once? Not so easy this time for in unity there is strength, which proves the old adage. Unity? Organization? They are one and the same.

The California beekeepers have shown what organization can do by putting up the necessary money on a loan basis with the State Department of Agriculture to start the legal wheels turning to obtain a Marketing Order for honey. These loans were to be paid back if the Marketing Order was successful, otherwise it was spent and lost. These men had faith both in the beekeepers of this State and in the beekeeping industry to be willing to take this gamble. It took a lot of work on the part of the workhorses of the industry to get both the handlers and producers together on a program, but it was done. The handler deducts five cents per can when he buys from the producer, and in turn adds five cents per can himself. This money is turned over to the State Department of Agriculture. A Honey Advisory Board, consisting of five producers and five handlers, each elected annually by their respective groups, budgets this money and spends it in a way that they feel will do the industry the most good. The results have been more than gratifying to the industry in the short time it has been in operation.

Our civilization is becoming more complex daily and the idea of every man for himself has been lost in the shuffle from the old to the new. I shudder mentally and physically when I think of where our industry would be today in this changing world had not some of our far-sighted and industrious beemen kept hammering on the idea of a national organization. This national organization, the American Beekeeping Federation, is behind everything that is best for the industry. It is this organization that has kept abreast of the times and that hasn't let our industry get lost in the eyes of the people, the farmers and Congress. It has taken weeks and months of the officers' time to sell pollination, subsidy and now mandatory support for our honey.

Let George do it? No, not any more, for George alone would have been lost long ago under the changing conditions. We need the Federation now more than ever to see that we do not lose the gains we have already made and to keep up the good work that has been started. Don't you think it is about time that you grabbed an oar and gave a helping hand to your own industry? Do it now by joining and backing your American Beekeeping Federation.

"In organization there is strength."

How the Federation Works

by Robert Banker

If each and every beekeeper could work here in the office for just one day, so that he might see the variety of requests, the voluminous correspondence and the many functions and services the Federation performs through its office, he would soon realize that the Federation is working for the sole benefit of the honey industry and that the Federation's activities are putting dollars in the beekeeper's pocket in more ways than perhaps most individuals realize. The industry would soon become lost in the hustle and bustle of this modern busy world without a national organization to represent it.

The Federation and the Honey Industry Council, of which the Federation is a vital part, is recognized in Washington as the voice of the producers and the voice of the industry. Only through that voice can we as an industry expect to be consulted and reckoned with on issues affecting our industry, and only through such an organization can the industry expect to be recognized.

While the Federation does not claim to be solely responsible for such programs as the present Loan and Purchase Agreement Program, the Export and Diversion Subsidy Programs and others, I don't think any one can honestly say that these programs would be available without the Federation. These programs alone have brought the producer at least one to two cents a pound more for each pound of honey produced.

Our honey promotion program perhaps has not been expanded to the extent it should be mainly because of lack of funds. **With the moral and financial support** of the major part of the beekeepers of the country, it would be entirely possible to expand our Marketing Committee and research work to the point where honey would actually be in scarce supply and sell at 50 to 60c a pound. Impossible, you say? Honey that we would call inferior, is selling readily at those prices in other parts of the world where the general economic level is far below that of our country. It perhaps wouldn't be if it wasn't for the fact that in those countries up to 95% of the beekeepers belong to their national organizations and some national organizations have deposits of over $150,000 annually, with a good portion of that amount expended on honey promotion and research.

In this great country of ours, nothing is impossible if each one of us puts our shoulder to the wheel in a determined and united effort. That check you were going to send but somehow or other didn't get sent, might be that little extra push that's needed.

Our Duty to the American Beekeeping Federation

by E. F. Bea,
Minnesota

Most beekeepers will agree that we must have an organization which will protect our interests on a National level and ordinary common sense should prompt us to see that we have representation in Washington, D. C. during the time when vital measures are being decided.

We are all guilty of putting things off and many with the best intentions just never get around to digging down in the billfold or writing out that check which will help to defray the expenses of waging a successful campaign which is being fought for our mutual benefit. The "Let George Do It" attitude has many followers in all walks of business, with beekeeping being no exception.

The Dairy Industry has just announced that it will spend a huge sum of money advertising its products this coming season. With the proper support the beekeepers could launch an advertising campaign which would create a honey shortage.

With its limited funds and the mediocre support which the Federation has received we should be very thankful that our honey market is stable and still bringing a good

price. We should appreciate the efforts of our unselfish officers in providing a support price, the school lunch program, the purchase agreements and farm storage loans, and the export subsidy from which we have all benefited.

A certain beekeeper in this area is selling honey which retails at 79c for a five pound pail. With honey at 12c per pound and pails costing around 14c delivered plus a cent for label and work of applying it to the can, this would bring the cost of this five pound pail of honey to the **producer** to 75c counting the cost of processing, packing, or delivery fee. He evidently likes to keep bees instead of having the bees keep him, and that is about the same as keeping bees without supporting our Federation.

Right now while the matter is before you, why not sit down and pay up for another year, and get a friend who is not yet a member to join?

Packers and Dealers and the Federation

by R. B. Willson
New York

Packers and dealers have their own organization and beekeepers theirs — the American Beekeeping Federation. One would not expect a beekeeper, as such, to join the National Honey Packers and Dealers Association, because as a honey producer his interests lie elsewhere. But how about a dealer or packer being a member and supporter of the Federation? Are there objectives of the Federation that are the concern of packers and dealers as well as honey producers? Let's take a look.

1. The Federation promotes and is responsible for an annual honey promotion campaign coordinating the efforts of government, producers, packers, and the American Honey Institute. This effort has been demonstrated as the most valuable project ever undertaken by the American honey industry.

2. The Federation has promoted within the past decade the biggest public relations job ever undertaken by our industry with outstanding success—that is the instruction of the agriculturist, in and out of educational institutions, in the essentiality of our honey bees to our way of life through pollination. Much of this has seeped down to the layman many of whom now know that we eat as well as we do in America thanks to the honey bee.

3. The Federation holds and brings together all facets of our industry. It is not easy to conceive of well attended annual meetings of all the related organizations within the honey industry without the impetus of our strong producers' organization. Without it we would have no Honey Industry Council.

There are more, but let these three points alone demonstrate conclusively why every packer and dealer should be a member and financial supporter of the American Beekeeping Federation. It is the tie that binds. It is the mainspring. It is the heart of our organized industry.

USDA Honey Report - October 1954

The 1954 honey crop is estimated at 213,658,000 pounds—5 per cent less than last year's crop, according to the Crop Reporting Board of the Agricultural Marketing Service, based on reports from about 8,000 beekeepers. This year's crop is being produced by 5,452,000 colonies of bees—1 per cent fewer than in 1953. Honey production per colony averaged 39.2 pounds as compared with 40.5 in 1953. In mid-September producers had about 81 million pounds of honey on hand for sale—about 38 per cent of the estimated 1954 production.

Honey production is below last year in all regions except the west and south Atlantic states where it is up 14 and 6 per cent respectively. Decreases were mainly due to drought, short crops and cool rainy weather in some areas.

The ten leading honey producing states this year are California, Minnesota, Florida, Wisconsin, Iowa, Idaho, Michigan, Texas, New York and Ohio. These states produced 60 per cent of the crop.

Honey yields per colony this year, because of the drought were the lowest since 1948. Increase in the West was mainly due to the increase in the California crop from 44 pounds last year to 63 pounds this year.

Important honey states showing decreases were Minnesota from 85 pounds last year to 80 pounds this year, Wisconsin from 78 to 53 pounds, Iowa from 77 to 50 pounds, Michigan 45 to 40, New York 41 to 32, Texas 33 to 25, Ohio 28 to 24, and Arizona from 90 pounds to 67 pounds this year. In Illinois yields were 40 pounds per colony this year as compared to 31 pounds last year.

Wasp Control . . .

Wasps that build their homes too close for personal comfort can be dealt with easily, the U. S. Department of Agriculture reports. Entomologists of USDA's Agricultural Research Service disclose in a new publication that after-dark application of chlordane or DDT to nests of these insects gives good control at minimum risk.

(Single copies of the publication can be obtained free from the Office of Information, U. S. Department of Agriculture, Washington 25, D. C. Ask for Leaflet 365, "Wasps—How to Control Them.")

The ARS entomologists recommend that chlordane or DDT be applied to the nests at night because wasps are less active then and more likely to be in the nest. Sprays or dusts should be concentrated on nest openings.

Hornets and yellow jackets and their nests can be removed as a unit by plugging the nest opening with a wad of cotton soaked in carbon tetrachloride and then quickly dislodging the nest into a sack that can be burned, buried, or put into an airtight can containing a few tablespoonfuls of carbon tetrachloride. used on cotton wadding, carbon tetrachloride slows down the activity of these pests and lessens the chance for stings; in an airtight can, this insecticidal fumigant kills the wasps in 24 hours or less.

The various types of wasps and their nests are illustrated in this new publication. Their habits and natural enemies are described, along with other valuable information.

Imagination . . .

This picture was taken by John Buchanan, Medina, Ohio, at the Federation convention last winter in Baltimore, Maryland. The exhibit was planned and set up by John Smeltzer, of Washington, D. C. Smeltzer was then only a small beekeeper with five colonies of bees but his enthusiasm for beekeeping and honey knows no bounds. He looks ahead to a possible hundred colonies. Then what? The figure of the elderly gentleman indicates considerable anticipation for breakfast. Smeltzer's supply of honey in the pyramid should give the old fellow much delight for many breakfasts to come. At the lower left honey is tied with graham crackers, raisin bran, possibly other items out of the picture. There were larger exhibits on the hotel mezzanine but none more suggestive of the real value of honey as a food.

Champion . . .

Gene Killion (Killion & Sons Apiaries, Paris, Illinois) at the National Honey Show, in St. Paul, emerged a champion with these trophies. Trophy at right was for comb honey and given by the A. I. Root Company. Center for beeswax, given by Dadant & Sons, Inc. The one at the left was for chunk honey, given by the G. B. Lewis Co. The trophy Gene is holding was for the best exhibit, awarded to the comb honey display by the American Beekeeping Federation. Good boy Gene, and papa Carl must have to buy a new suit to make room for chest expansion. Gene and his father are experts in comb honey production, with headquarters in Paris, Illinois.

Years Ago . . .

C. C. Parkinson, of the Richmond, Virginia, Beekeepers Association, loaned the original of this bee hive patent, which he secured from R. K. Carter of Carter Brothers, Inc. (Richmond). The patent was issued to Mr. Carter's grandfather in July 1840. The legal protection of John Evans' patent is a bit hazy as the U. S. Patent Office is not mentioned. Protection must be from local courts. The fine of $50 at the dollar value of 1840 must have been pretty stiff.

PATENT BEE-HIVES.

Construct your house as follows:—With four posts six feet long; each post to stand in a small water trough during the summer season; house to be six feet long and four wide, to be weather-boarded close and tight; the top to be covered close and tight with shingles; the inside to be lined with thin plank; the floor to be two feet from the ground; a small door in the four feet end; cut small holes, half an inch apart, upon the six foot side, just the size of half of a five cent piece, and sufficient to admit one bee at a time; the first swarm put box and all in the centre of the floor. In order to take out the honey, have a wooden pipe with a reed stem, blow the smoke against the bees, and they will disperse; an iron shovel and wooden fork to take away as much honey as you may see cause to take from one swarm. You will in five years have eighty-one swarms. You can cut out one hundred gallons of honey the fourth year from one swarm; you will never know when the bees swarm; kill none, nor lose none.

Any man who infringes on this Patent Right, the fine is $50. Price of one ticket one dollar.

JOHN EVANS, [His Patent.]

***July* 22, 1840.**

A Honey House in Virginia

by H. L. Maxwell

The writer in his office. Area is 18x20 feet, and walls are of knotty pine and contrasting mahogany veneer. Desk was made in their shop of red cedar, white pine and cypress. Picture to right of window is "the artistry of the wax weevils."

THE honey packing plant we are about to describe is the third one we have built, in addition to having leased several improvised ones, in something over twenty years in this business. This plant is the end result of the needs of our project as it crystallized by trial and error. It is three years old and is now not large enough, but plans for expansion are under way.

We own and operate about 2500 colonies of bees for honey production and we process, pack and distribute all the honey we produce besides buying honey in short crop years. We must, therefore, be prepared to pack honey at any time. We are never out of honey as that is a sure way to lose customers.

We can best describe our plant by theoretically taking our readers on a tour from department to department. We shall take you in the back door and follow a truckload of honey as it comes from the apiary. The garage accommodates two trucks. It is bee-tight, we can harvest a load of honey in the forenoon, store it in the garage, harvest another load in the afternoon and unload both trucks in the evening if we are rushed.

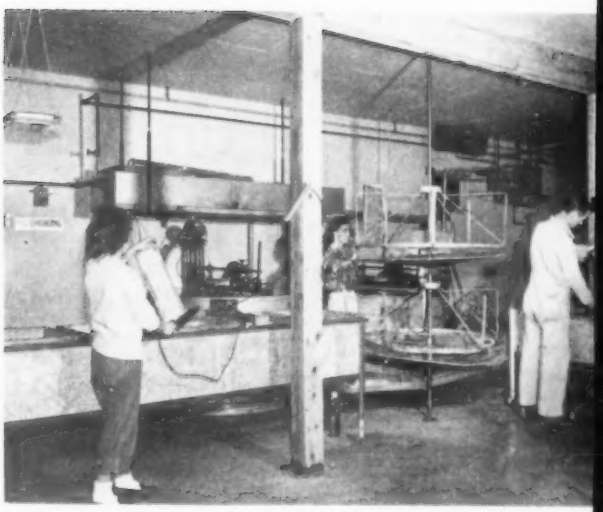
Normally, supers are unloaded from the truck to flats which are towed into Department No. 1 and lined up for temporary storage. Eight supers are stacked on each flat and crossed to allow fumigation. When they are needed in the extracting room, the tow-truck simply slides underneath, lifts the stack of honey, and moves it into Department No. 2. Department No. 1 is also a storage area for some 6,000 supers during the eight or nine months they are not in use. It has no windows and can be sealed off. We fumigate by burning sulphur at ten-day intervals. A large fan airs the room after fumigation. We use metal pots and on our concrete floor there is no fire hazard.

We have had much grief with damp floors so we learned how to construct a floor that would not be damp at ground level. First we poured four inches of concrete on a cinder bed. After setting, we mopped the floor with hot tar, then covered with fifteen-pound felt, then repeated the tar and felt until we had sealed four layers of felt on this base floor. The top floor was three inches of Grade A cement, machine troweled. This floor is smooth and easy to clean of wax with an ice scraper. We use rubber-tired trucks to avoid clatter and wear.

Next we move into the extracting department, Department No. 2, the heart of the whole plant. Here we have two fifty-frame radial extractors, with the usual double-deck merry-go-round. There are two capping vats, with five baskets each, sufficient to hold the cappings from 10,000 pounds of honey. We use two electric knives at present but have under development special uncapping knives which will be power operated. We use shallow supers entirely for extracted honey.

In the picture of this department it can be seen how the honey flows from the capping vats, the merry-go-round and the extractors to a reservoir between them. Then it is pumped to the warming pan which is water-jacketed and the water heated by steam. Here the honey is heated to a temperature of about 130 degrees, strained roughly by baffles, and flows into a reservoir tank holding 1200 pounds. A normal day's production for three girls, two operating knives and one loading and unloading the extractors, is 8,000 to 10,000 pounds per day.

Our processing equipment is the most important feature of our plant. We had increasing trouble from yeast development in newly extracted honey and found it necessary to correct this situation. The equipment we designed and constructed was made with a view to completely process our honey simultaneously with the extracting operation. Our objective is to kill the yeast plants immediately through pasteurization and to bottle the honey as soon thereafter as temperature will permit. From the time the uncapped combs are placed in the extractors, we do not touch the honey until it is completely heated, filtered and deposited in stainless steel storage tanks in Department No. 3. In an eight-hour day we can extract 8,000 to 10,000 pounds of honey and have it completely processed and ready to bottle the following morning. If we



Above left: A honey house in the Sunny South — north of Washington.
Right: Department 2 where extracting is done, area 20x60 feet. Flash-heating assembly is shown on the wall near the ceiling and next the opening. Note merry-go-round, capping vats, warming pan mounted over extractors. Reservoir tank is at left of Dolly Brill facing camera. Dorothy Willingham and Harry Greineisen are showing uncapping knives.

run both an extracting crew and a bottling crew, we can average a daily pack of 12,000 pounds of chunk comb honey.

We feel a detailed description of our procession equipment will be of most interest to readers, so we refer you back to the reservoir tank mentioned in an earlier paragraph. This tank we call the "Fifth Wheel." It is necessary because the flash heater cannot safely handle the load directly from the extractor because of the irregular volume while extracting, and mainly because of the wide differential in temperature of the honey at the point of extracting, as compared to the maximum temperature desired at the flash heater. We like a room temperature of 85 degrees around the clock in Department No. 2. However, we want to heat the honey to 165 to 168 degrees Farenheit in the flash heater with a minimum of 155 degrees at all times. So we get this maximum temperature most easily by first warming the honey in the warming pan to an average temperature of about 130 degrees, then allowing the honey to accumulate in the reservoir tank to about one-half a ton volume. Then the second pump is cut in and the flash heater, already pre-heated, is set in operation. The proper temperature in the flash heater is obtained by gradually increasing the aquastat reading, starting at 140 degrees and running the pump for thirty seconds, then stopping for thirty seconds, keeping up this rotation, the while increasing the aquastat reading at intervals until the mean temperature of around 160 degrees remains fairly constant. As the honey comes out of the flash heater, there will be some deviation from this mean temperature, in a pumping operation, due to the activity of the aquastat in controlling the flow of hot water about the honey coil. This gradual development of the correct honey temperature is very important, especially to avoid scorching the honey in the flash heater. It takes only a few minutes. The same procedure is necessary as one nears the end of the day's operation, or when a tank is about filled, and it is desired to cut the second pump and to stop the operation of the flash heater.

The flash heater arrangement is something we have improvised and found adequate. It consists of two heating units, each filled with about 120 feet of ¾ inch copper tubing. The two units are connected by two-inch piping at both the bottom and the top to allow quick circulation of water around the coils in each. Live steam is piped into the first unit at 5 to 8 pounds pressure. As the water surrounding the coil inside this unit is heated, it begins to circulate around the coil in the second unit, and it is at this point that heat will be transferred to the honey now ready or flowing through this second coil. An electric control box, located back of the heaters on the wall, is operated by the aquastat, which turns on or cuts off the water circulation in accord with the demand of the register for more or less heat. The honey flows from the flash heater through tubing into Department No. 3, where it is emptied into the gravity filter, in which we use 120 mesh cloth, and from there into the storage tanks. We find the honey is clean enough to be bottled immediately, particularly, if only strained honey is bottled when the higher temperature would be of no consequence. However, we prefer to let the honey settle overnight, since more complete clarification results from dissemination of air bubbles, and the rising of any foam, which is caught by our floater strainer, one of which is dropped to the floor inside of each tank before filling. It is possible to empty our tanks completely without having a residue of scum or foam in the last containers.

We like to say we strain our honey. We roughly strain it through coarse wire cloth before it enters the first pump. It is further clarified in the warming pan through the use of baffles. Then it passes through two strainers into the first reservoir tank, or "fifth wheel." There it settles somewhat after that tank is filled. It is strained through 120 mesh cloth in the gravity filter, and is further strained through the cloth covers of the storage tanks and finally through the floating strainer inside the tank.

The above is the most important operation in the handling of honey.

(Please turn to page 436)

Some Observations on the Collecting Habits of Bees

by F. R. Shaw, M. Savos, and W. M. Shaw

University of Massachusetts, Amherst

MANY beekeepers have the opinion that bees collect either pollen or nectar on a single trip. However, bees may collect both materials on the same trip. Just what influences some bees to collect both nectar and pollen on the same trip is not known. Among the possible factors would be availability of both materials and also the colony needs.

This year in connection with some studies on the pollination of apples it was observed that considerable numbers of bees were collecting both nectar and pollen on the same trip. Hence, it was decided to include in our observations records of the numbers of bees collecting pollen alone, those collecting pollen and nectar, those collecting nectar alone and those with neither pollen nor nectar. The sugar concentration of the nectar is also included for the sake of completeness.

The same observations were continued on several other plants including honeysuckle, cultivated blueberry, orange hawkweed, strawberry, white clover, alsike clover and red raspberry. The data have been summarized and appear in the following chart.

From the data presented it is obvious that a considerable number of bees do collect both nectar and pollen on the same trip at least from certain plants. It is evident that the proportions of bees collecting both nectar and pollen vary considerably even within the same plant species.

Parker, 1926, has indicated that the availability of pollen varies in some plants with the time of day. Our data in part substantiates this. Thus our observations on apple on May 13 showed that 70.4 per cent of the bees were collecting pollen or pollen plus nectar on the same trip. These data were obtained between 1:15 and 2:15 P. M. On May 15 collections were made from 10:00 to 12:00 A. M. In these instances the percentage of bees collecting pollen or pollen plus nectar on the same trip varied from 50-54.

According to Parker's data, 1926, only 31% of bees working apple collected pollen or pollen plus nectar on the same trip. Since our data indicated a higher proportion, we attempted to determine the reason. We believe that the colonies were in great need of pollen. The early spring had been unusually warm and brood rearing had been carried on at a high rate. May was unusually cold and had excessive rain. Moreover the weather during fruit bloom in general was cold and windy and bee activity was reduced.

The data from cultivated blueberries are of interest. Apparently honey bees did not collect much pollen from these flowers since only 4% of the bees collected had pollen in their baskets. It is known that honey bees are effective pollinators of these fruits, however.

Strawberry apparently yields a considerable amount of pollen. Thus from 76-87% of the bees collected had pollen. Since our observations on strawberries were all taken in the morning, we could not determine whether there was a variation in pollen availability at different hours of the day.

Neither red raspberry nor orange hawkweed appeared to furnish much pollen during the period of our observations. Approximately 25% of the bees collected had pollen.

Of the two clovers studied, bees apparently collected more pollen from alsike clover than from white clover. Our data in respect to alsike clover agrees closely with that of Parker, 1926. However, our data on white clover indicates that fewer bees, 28% as compared with 45%, were collecting both nectar and pollen at the same time.

It was noted that considerable variation in the pollen loads occurred, depending on the plants being worked. Thus bees working apple had well filled pollen baskets. Those collected on white clover had very small loads.

In conclusion our data indicate that under certain conditions relatively large numbers of bees collect both pollen and nectar at the same time. The reasons why certain bees collect both at the same time are unknown.

— TABLE 1 —

Plant	Date	Temp.	Rel. Hum.	Amounts in per cent P	P & N	N	O	Sugar Concentration of Nectar in per cent
Apple	5/13/54	59	51%	40.9	29.5	16	13.6	42
Apple	5/15/54	61	64%	30.8	19	38.4	11.8	57.7
Apple	5/15/54	68	63%	34.3	20	37.1	8.6	54.5
Honeysuckle	5/16/54	70	59%	23.2	11.6	34.8	30.4	22.9
Cultivated Blueberry	5/24/54	67	58%	.....	4	76	20	20.8
Strawberry	6/ 5/54	70	54%	15	65	17	3	28
Strawberry	6/ 6/54	68	61%	20	56	24	0	36.2
Strawberry	6/ 7/54	66	60%	30	57	11	2	26.4
Orange Hawkweed	6/18/54	74	42%	.....	25	45	30	22
Red Raspberry	6/18/54	72	40%	.....	27.2	51.8	21	30.7
White Clover	6/20/54	79	60%	7.5	28.1	52.4	12	39.9
Alsike Clover	6/20/54	81	57%	24	44	28.2	3.8	42.2

Explanation: P—Pollen alone, N—Nectar alone, P & N—Both nectar and pollen on same trip, O—Neither nectar nor pollen.

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Mead Makers . . .

Mead Makers Distribution Company, Norfolk, Conn., (American Agents for Cornish Meads) gave out many copies of their brochure at the Baltimore meeting of the Federation. Cover line says "The berries of the grape with Furies swell, but in the honeycomb the Graces dwell." Five hundred years ago this clear, golden-yellow nectar was the drink of all Englishmen. The knowledge of making mead was never quite lost. In English hamlet and Wessex farmhouse the art was preserved. And Mead Makers, Ltd., have revived this ancient industry at Gul-

Pottery Gets Into The Honey Business

by John Frank

President Frankoma Pottery,

Sapulpa, Oklahoma

These are the Frankoma pottery honey containers used by Old Taylor Honey Co., Chandler, Oklahoma.

YOU ask how we potters got into the honey business. Frankoma was twenty-one years old in June. We have made cases, sculptures, tiles, flower pots, flower bowls, jugs, mugs, dinnerware, ovenproof wares and many other items both useful and beautiful.

As our business grows we look to new and varied markets for wares that can be made from our clays and we can see many new fields that have not yet been touched. So we are constantly experimenting with products that can be made with clay, as we know we can always stay in business if we can CREATE a market or CREATE FOR a market.

One day, two years ago, a "sweet" couple, Mr. and Mrs. Jones, visited our show rooms and, because we are creators and make a most durable, beautiful and inexpensive ware, Mr. Jones asked why we couldn't make him a container for the promotion of honey butter. Before he left we had undertaken a new assignment — a honey jar. It proved to be so successful in two years that many beekeepers across the country were asking for jugs, vases and jars for bottling their liquid honey also.

"Old Taylor" (honey that is) of Chandler, Oklahoma, took notice of the unusual containers and, along with Bill Daugherty, Frankoma's Manager, developed an idea of bottling honey for us in our own containers. The deal was good enough to enable us to offer the assortment wholesale to our regular department stores, gift stores, and gourmet shops. Mr. Taylor is saving a particular vintage of his honey, gathered from wild flower areas, and holding it just for our trade. We call it "Western Wild Flower Honey."

We have found the honey business fascinating. During our reading we noticed an article in one of the journals to the effect that a lot more honey could be sold if more promotion was put into the selling of it. This is true of every business. There is really little wrong with any BUSINESS; it is the PEOPLE in it. Realizing that honey by itself is cheap but that select honey, well packaged and properly presented, brings a fair, good, or even a premium price, we became more and more interested in the honey business.

We designed eight beautiful containers, holding from one to six pounds of honey, which, when empty, will remain a beautiful pitcher, jug, vase, or refrigerator bottle. We designed each piece so it will pour well, handle well and seal well with cork. In this way the original container can be used right on the table as part of the table decoration.

Then we called in the authority on honey, "Mr. Hon.E.Bee" himself and had him write a little story about honey. This little booklet is very short but cute and it is in demand around the country wherever anyone has seen it.

The first eight months we sold about eight tons of honey and we are just starting. Our containers are being used throughout the country by many honey distributors and we are building up a nice trade with them. We think this is a "sweet" deal and we intend to continue with its promotion. We agree with many others that the values and virtues of honey have not been "exposed" in the proper degree and that if they were, there is much business to be had that is now lying dormant.

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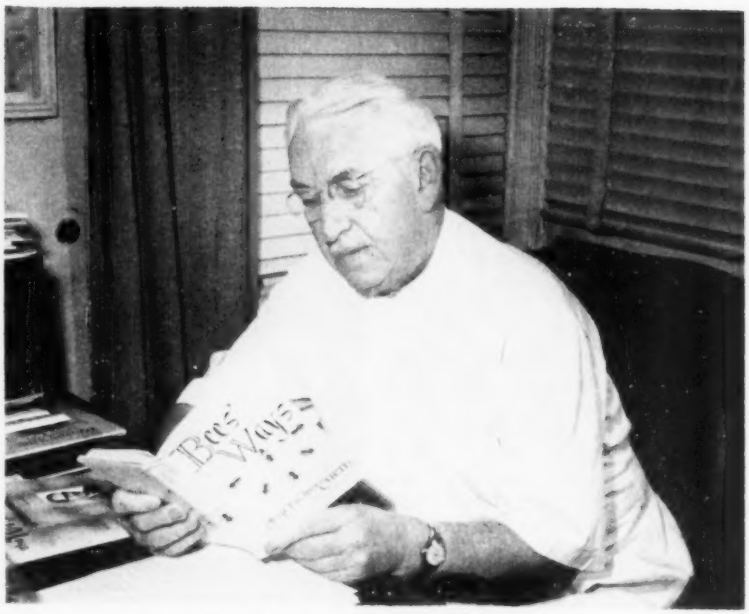
val, Cornwall. Mead is a blend of honey and herbs, fermented and aged to maturity. Says the brochure: "The wine drinker who has never tasted meads has a great experience still to come when he sees the golden liquor shot through with yellow flecks of dancing light, and breathing forth its subtle bouquet of the essences and nectars of a thousand woodland blossoms."

Mead Makers, in addition to using large quantities of English and Australian honey, have their own apiaries, using the long Gulval hive, as modification of the Dadant hive. Among the Company's apiaries is one of the eight breeding stations in the British Isles, under the control of the Research Institute at Rothamsted. Herb gardens at Gulval furnish most of the herbs used in the various meads; thyme, lavender, rosemary, anise hyssop, mint, and many others.

Dr. Carey's Bees Vanquish Arthritis

by Don Ryan



Dr. Raymond L. Carey, bee venom therapist, at his desk.

BEE sting therapy for arthritis is as old as history. Hippocrates, "father of medicine," tells about it nearly four hundred years before the birth of Christ. European physicians have treated this crippling disease with bee venom down through the centuries. Yet the medical profession in this country waves aside thousands of authenticated cures as old wives' tales.

There is one outstanding exception. Dr. Raymond L. Carey, osteopathic physician and surgeon of Hollywood, California, has been stinging arthritics with bees for twenty years. Evidence of the efficacy of his treatment has been piling up over this long period.

Recently I visited Dr. Carey, talked to a number of his patients and wrote an article about his work for a Los Angeles newspaper. Two weeks later a Manhattan Beach resident called me up to thank me.

"My wife Helen was helpless with arthritis," he told me. "She couldn't walk unless I held her up. She couldn't wear shoes. She had penicillin, cortisone — everything the medical profession had to offer. After reading your article I drove her into Hollywood and half carried her into Dr. Carey's office. After two treatments she walked out without any help. She is still getting the treatments. So far she has had eighty-seven stings. She can put on her shoes and lace them up. I'd say she is now about eighty per cent normal—hardly a limp—and I think she's going to be a hundred per cent before long."

On the outside of Dr. Carey's Hollywood bungalow is a wooden chute through which bees enter and leave the hive inside.

I talked to a man in his thirties, an inspector in a precision tool factory. John had lost his job. His arthritis had got to the point where he was unable to move his head from side to side. It was rigid on his spine. After two weeks of bee sting therapy John called on his boss. The latter stared open-mouthed while John gave him a demonstration, moving head and neck with swan-like grace. John got his job back.

Dr. Carey was a pupil of Dr. Bodog F. Beck, author of **Bee Venom Therapy.** He gives the Viennese authority full credit for restoring this unique therapy to its proper place in the materia medica, but he has gone far beyond the findings of his preceptor. Beck wrote:

"Bee venom accelerates and intensifies the circulation and dilates the capillary vessels. This results in increased metabolism and destruction of bacterial growth."

Dr. Carey does not agree with the latter statement. In fact, modern medicine has just about proved that bacteria have nothing to do with arthritis. Dr. Carey explains the action of bee venom thus:

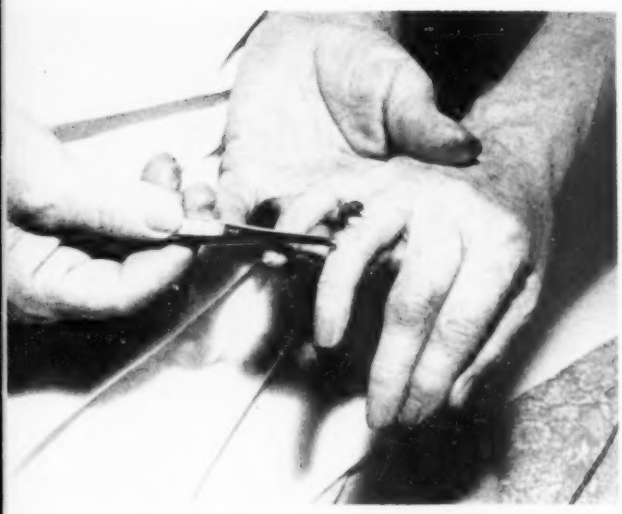
"Arthritis develops when joints and tissues get an insufficient blood supply. The blood carries oxygen. Oxidation is necessary to burn up the waste products. Lacking this, ankylosis eventually freezes the joints. They become immovable.

"Bee venom irritates the nerve ends which are momentarily paralyzed and release their hold on the capillary blood vessels. Blood flows in. Nature does the rest."

The pleasant bungalow in which Dr. Carey receives a daily procession of arthritic sufferers was built according to his specifications to combine living and working quarters. When you pass through the waiting room and enter his unique clinic your eyes are attracted to a glass hive standing in a window. Inside the hive a colony of more than fifty thousand bees are industriously storing honey. They come and go through a long wooden chute reaching above the roof outside.

Dr. Carey, white-smocked and white-haired, opens a small metal hatch and picks up a squirming bee with a forceps.

Art, a husky, thirty-eight-year-old salesman, is the first patient. Art sits on a stool. His shirt is off, his broad back bared. Dr. Carey de-



Treating arthritis in the fingers with bee venom. Note enlarged joints.

Bees doing their work on Art, the arthritic patient.

posits the bee on the lumbar region, low down on the back and the bee goes to work.

Its stinger drives in deep, the venom sac attached. The hollow stinger continues to drain the sac after the bee is removed. The bee is now dead, its mission accomplished. Another bee takes its place, another and another, eighteen in all. Art doesn't wince under this heroic treatment. He seems rather to enjoy it. He gets up with a grin and begins putting on his shirt.

"I developed arthritis when I was in the European theater in World War II," Art tells me. "It got very painful in cold, damp weather. Later in Africa it was better. Back home on Long Island it really got bad. At the veterans' hospital I got the works—everything from hot baths to cortisone. No dice.

"I came to California, to Long Beach, where I live now, but the arthritis was getting me down. I couldn't work. When I came in to see Dr. Carey three months ago, it was a job getting out of the car. I wobbled in here, unable to straighten up.

"I only got two stings the first time. You won't believe this, but those two stings loosened up this area in my back so I could walk erect when I went back to my car. Now my legs and back are almost normal. You don't see me wobble at all. Yesterday I made a two-seventy-five drive on the golf course."

The reason Art was stung on the lower back is because the central nervous system of that area controls the lower limbs, which in his case were becoming immobilized. Patients with arthritis in the arms and hands get stung in the cervical, the upper region in the back, which handles the movements of the upper limbs.

Some patients leave physical testimonials to their cures with Dr. Carey. One, a victim of spondylitis, has left the brace he once wore to support his helpless back. On the office wall is a framed photograph of a celebrated pianist's hands. They are resting on the keyboard. The autograph states that Dr. Carey's bees restored their use. The artist had lost it to the grim enemy that immobilizes bone and tissue.

There is plenty of evidence in Dr. Carey's bungalow that bee venom is a specific for arthritis. But Dr. Carey holds a theory of much greater import. He has not proved this theory. He wishes that some research institute with funds to carry on an extended program, using controls, would undertake the task. This is what he says about it:

"It is my belief that bee venom, through its effects on the central nervous system, stimulates the glands of internal secretion—the pituitary, the adrenal, also the sex glands—enabling the body to utilize its own hormones."

Dr. Beck noted that bee venom seemed to cause a "general afflorescence of the entire organism." The salesman Art told me: "I sure love those bees. I not only get relief from the suffering with arthritis, I feel good all over."

Dr. Carey has recorded numerous cases of painful menstruation normalized by bee venom.

He related this striking example of side effect:

"A young man was brought in to me one day on a platform mounted on roller skates. He was unable to walk, arthritis had gone so far he was practically ankyloid. His wife was with him. They had come to California from Arkansas—married nine years—crazy for children—but they had none.

"I began treating the man with bee venom. The treatment continued nine months. Some five months after the first stings the husband was able to go back to work at the creamery where he was employed. Six months after the treatment began the wife came in and asked me to examine her. I did and found she was pregnant. At the end of the nine-months period a fine baby girl was delivered. They called her 'Honey Bee.'"

California

Judd honey house. Note display window.

An Economical Honey House

by William Judd

OUR honey house is built of concrete block construction. It is lined inside with wallboard, with one-inch moistureproof insulation between the wallboard and the concrete block wall. We have a concrete floor with sewer pipe and drain in the middle to facilitate washing and keeping clean. The roof is of wood and asbestos shingle construction. A five-horsepower steam boiler furnishes steam heat for the building and for processing the honey.

There are two levels in our honey house; the extracting room being three feet higher than the processing room so that the honey flows by gravity.

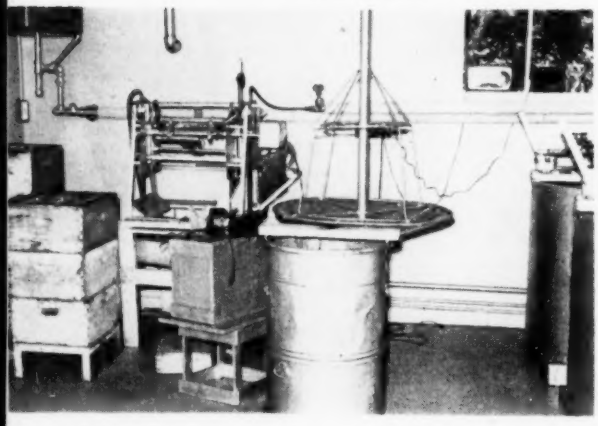
As can be seen from the pictures, in our extracting room at the extreme left is the uncapping machine. The box on a stand next to it holds an electrically heated knife used to uncap any small patch left by the uncapping machine. Next to this is a merry-go-round into which the combs are set as they are uncapped. The tank in front of the merry-go-round has a screened bottom and cappings are dumped there to drain. At the extreme right against the wall are the two 30-frame extractors. This room is arranged so that the combs can be passed from the uncapping machine to the extractors with few steps being taken. It is heated by a Modine heater.

From the extractors, the honey flows into a strainer in the processing room, and from the strainer into the clarifier or heating tank which is heated with steam. From the clarifier it flows into a sump, and when the sump gets so full an automatic switch starts the pump which pumps the honey into the stainless steel tanks. There are three of these, of 1,000 pounds each, connected in a series so that when one is full it flows into another. Our processing room is all automatic except for drawing the honey into cans or bottles, which is done from the tanks.

The handiest tool we have is a small four-wheeled truck. Our supers are stacked on pallets which are made of 2x6 pieces with a drip pan to catch any drip. This truck runs under the pallets and a push down on the handle lifts a stack of supers from the truck into the honey house where the workers can wheel it any place they wish.

My daughter and I do all the work of handling our 1,000 colonies. In the spring we go through every colony and check for disease and also for stores. We carry extra supers of honey over the winter for feed in the spring and if a colony is short we take out empty combs and put in full ones. Also, at this time, we check and replace any queens that do not seem to be up to standard. About the time of fruit and dandelion bloom, we start putting on supers. We usually put on two full-depth supers to start, then

Extracting room.



Settling tanks at lower level.

add more as needed. This is all top supering.

Swarming seems to be the biggest setback to honey production. For swarm control we have found that plenty of room and a good queen are the best prevention. Only about 5% of our colonies start queen cells, which we do not think is a bad average.

After the main clover flow starts we check our yards about every two weeks and by checking the yards and watching the flight of the bees we can tell which colonies need attention and add more room to those that need it.

At extracting time my daughter takes over the extracting in the honey house and I bring in the honey. This year, I was lucky in having my youngest son to help bring in the honey. We use acid boards to take the honey off the bees.

We operate our colonies in three brood chambers the year round, which I think keeps them from getting congested and crowded early in the spring. If we have a large crop, we hire a girl to help with the extracting and work in the honey house but with the small crop this year, we haven't needed outside help.

Wisconsin

Honey Is Kind to Your Heart

by D. C. Jarvis, M.D.

YOUR heart is the motor of your human machine. As such it deserves thoughtful consideration. Your heart is a muscle which has the ability when working in a normal way to pump six ounces of blood at each heart beat into the large artery leaving the heart. This blood carries food and oxygen to the cells of your body. Food and oxygen enable each body cell to carry on its vital activity of making heat and energy with which to do the day's work. The muscles of the body work on sugar. Your heart being a muscle also works on sugar. It makes a great difference to your heart whether you give it a natural sugar which honey represents or give it a refined sugar which white sugar represents. You can be kind to your heart by giving it honey with which to do its work.

The amount of sugar in your blood is one teaspoonful. This amount is so essential that if it were reduced to one-half teaspoonful you would lose consciousness. If it were increased for any length of time to more than one teaspoonful diabetes might make its appearance. You should give careful thought to what you give your body to make this one teaspoonful of sugar that must be constantly present in your blood.

Nature intended that we not only have sugar for immediate use by the heart but also have a thin trickle of sugar going through the intestinal wall all the time. In honey we have a sugar called dextrose and another sugar called levulose. Levulose represents approximately 40 per cent of honey and dextrose about 34 per cent. When honey is swallowed the dextrose passes rapidly into the blood but the levulose being more slowly absorbed maintains a steady level of blood sugar concentration. Because of its levulose content, honey does not raise the blood sugar level faster and further than can be dealt with by the body. This in itself is an excellent reason why you should select honey with which to maintain the normal teaspoonful of sugar in your blood.

You use care in selecting the proper fuel for your car. You learn by experience that car performance is related to the kind of gas you buy. Do you use the same care in selecting the proper sugar for your heart? Experience is our best teacher. Experience teaches us that the human heart works best when given honey. Try to remember that honey is kind to your heart.

Vermont

Pollination of Vetch in Texas

"Pollination of Hairy Vetch by Honey Bees" is the title of a 4-page Mimeo paper designated as Progress Report 1649, by Nevin Weaver, Texas Agricultural Experiment Station, College Station, Texas. It reports an experiment to determine the value of pollinating insects to seed production of hairy vetch conducted in the spring of 1953. The test field was in seventh year voluntary vetch which had received 125 to 175 pounds of superphosphate, 0-14-7 or 3-12-12 fertilizer per acre annually.

Although an apiary of about 50 colonies of bees was in the test field, there was reported less than 1 colony of bees for each 3 acres of vetch within normal flight range. Cages 6x6x36 feet were constructed over 10 random selected areas, and 5 other plots of the same size were left uncovered so that pollinating insects had free access to them. Small colonies of honey bees were placed in 5 of the cages, and the other 5 excluded all pollinating insects. The seed in the plots was harvested by hand.

In the experiment no significant difference in seed yield was noted between plots with open cages and those containing honey bees, so seed yield in the open plots was credited to them also. Results showed that vetch with adequate numbers of honey bees yields 20 times as much seed as vetch with no pollinating insects. Honey bees worked the vetch very slowly and a large number of bees are necessary to saturate a field, but, until other factors affecting seed yields are understood and controlled, complete saturation of a field does not appear economical.

Disease of vetch appeared to have been the main limiting factor during the course of the experiment, and no increase in seed yield resulted from 4 applications of insecticides, probably due to the nature and timing of the infestations.

Selling Honey by Flavor

by M. H. Lyons

IF WE are going to sell honey we must remember that the bees bring in many kinds of honey besides clover. As a matter of fact, the U. S. D. A. listed 46 flavors in the honey support program information bulletin.

In Wisconsin, certain bee-yard locations will not furnish the same flavored honey every year. Many beekeepers get more dark than light honey and that can be sold if it is of good flavor and properly labeled.

If we are going to be honest with the customers who buy our honey—and we must be honest with them if we want to keep their business—we should label our honey by flavor not just by color.

As you know, white honey could range in flavor from the popular clover through basswood, fireweed and others to aster which is not so popular. Even honey from the different species of clover tastes different, there being 64 kinds of clover in North America according to "Honey Plants of North America," by John H. Lovell, published by the A. I. Root Co.

It is not easy to sell a strange flavor of honey to the public if they have never heard of it. While sage honey sells well in California where it is produced, it moves very slowly from the shelves of stores in Wisconsin. Most buyers here think of sage in connection with turkey dressing.

Many flavors occasionally obtained in Wisconsin might prove popular but they are not always obtained in sufficient quantity for year-round selling.

Therefore, we have put our efforts into bottling and selling just four flavors native to Wisconsin and produced nearly every year in some part of the state. They are basswood, buckwheat, clover and wild flower.

We helped sell honey one day this summer at the state fair. The state beekeepers association operates a booth where all the honey is labeled, "STATE FAIR HONEY produced by members of the Wisconsin Beekeepers Association." They buy honey by bids and of course most of the honey is white, only a little marked golden. After hearing repeated requests for basswood and buckwheat honey, the booth manager finally gave us an order for some of our honey labeled by flavor. He finally decided, why should we lose these sales.

We have found that by designing a label that tells the contents plainly, honey labeled by flavor sells much better than when it is just labeled "honey." Many persons have bought just honey and found they did not like the flavor. Then they are apt to decide that all honey is the same and buy no more.

Many storekeepers selling our honey tell me that buyers in their stores now act toward the different flavors of honey as they do toward the different flavors of jam or jelly. That is, they try one flavor this week, then next week try a different flavor. In other words, with a choice before them, they buy more honey than if only one kind were shown.

And that is what we are after—to sell more honey.

To take care of our increasing business we are planning on forming a company, incorporated in Wisconsin, to set up a model bottling plant to bottle honey by flavor.

If you have honey to sell and would like to get top prices for top quality honey and also share in the bottling profits, you are invited to write—M. H. Lyons, Loganville, Wis.

Beekeeping Organizations Abroad

by M. H. Haydak

Department of Entomology and Economic Zoology, St. Paul, Minnesota (taken from Minnesota Beekeeper, January, 1954).

THE organization of beekeepers is astonishingly great in other countries. Dr. Haydak mentions organizations in Czechoslovakia, West Germany and Switzerland. Of the three Czechoslovakian regional associations, Czechian, Moravian and Slovakian, the total number of beekeepers in the Czechia area is 45,653, of which 76% are voluntarily organized in their association. Of the total number of colonies, 91% are owned by the organized beekeepers. In Moravia 85% of the beekeepers are organized and in Slovakia, which is large, 45% are organized and they own 66% of the total number of bees. Each member of these organized beekeepers associations receives his own regional journal and subscribes to others besides. The organizations are supported by the majority of the beekeepers so they can develop an outstanding program. The beekeepers also insure themselves and bees against theft, damage, winter loss, disease, and so forth. The organizations maintain observation stations, and publish books and pamphlets.

In West Germany in the "Deutsche Imberbund," (German Beekeepers' Alliance) in 1951-52 there were 303 district associations, 3,364 locals and 175,815 members managing 1,891,635 colonies. The city of West Berlin alone had 12 local groups.

The German association maintains a corporative membership with other organizations, a sort of interlocking plan, not only in Germany but with Austrian and Swiss organizations. In addition to their official organ, "Deutsche Bienenwirtschaft," they also publish "Zeitscrift fur Bienenforschung," a monthly publication of research.

The German association has obtained a 40% duty on imported honey, brought about the unification of honey packing and has 220 bottling plants for members.

The Switzerland area has one of the oldest organizations, "Verein Deutsche - Schweizerischer Bienenfreunde," (Union of Swiss-German Beekeepers) with 24,136 members in 129 societies. Total bank deposits of the Union during 1951-52 were worth 596,181 Swiss francs (about 4 francs to a dollar) of which 331,245 francs were held in the disease fund. There were 213 special lectures, 80 beekeeping courses and 173 supported queen-rearing stations. They publish their own bee journal, "Schweizererische Bienenzeitung" and contributed 49,000 francs for the publication of "Beihefte," the supplement to the Journal for research. The Verein spent 10,000 francs for advertising and publications on honey, and maintained 66 observation stations for weather, weight changes of scale hives, consumption of stores, and so forth. The Verein furnishes liability insurance for damages, for accidents, foulbrood insurance and others.

The average crop for 10 years for the whole of Switzerland from 1943-1952 was only 12 pounds a year, at the highest 22 pounds. In 1952 average was 16½ pounds, highest average in any locality was 37½ pounds.

However, here is the point. Beekeepers receive 76 cents per pound for honey.

A Cloud of Bees

by T. J. Wells

I know some readers of this article will recall similar instances in their beekeeping. On May 20 last year, my bees were working hairy vetch, the vetch was in full bloom about three feet high and purple with blooms. My bees made a grand build-up, and the hives were all ready for the vetch honeyflow. The hive entrances were the busiest intersections in Oklahoma. On this particular day the weather was fine and the air was clear. The vetch field was west of the hives. A sudden thunderstorm came up from the west about ten o'clock. Now it seems old Mother Nature provides bees with a sixth sense to determine an approaching storm, so they all came in at once. When I looked up I observed a black cloud of bees, several hundred yards away. I had 38 colonies on the location, and when they arrived I had never seen so many bees at one time in my life.

You may have had a strong hive issue about a ten-pound swarm without the queen and then return to the hive. Well that is the way the bees were clustered on the front of every hive, to a height of about three feet, and all over the ground. I stayed and watched after it began to rain, and most of the bees got into the hives, some of them stayed clustered in front of the hives during the downpour, but to my surprise I don't think the rain drowned over a teacupful of bees, from all of the hives.

I have observed bees coming home in front of a storm many times, but never so sudden as this . . . it was truly a cloud of bees.

Oklahoma

Cornell Starts Exploratory Investigation of Royal Jelly

In recent weeks several articles have appeared describing the alleged values of royal jelly for human uses —in medicine, as an ingredient in cosmetics, and the like. It has been stated that royal jelly will do many things, from restoring important ingredients to the skin to curing certain diseases.

Contrary to published reports, **Cornell University has carried on no research concerning the effects of royal jelly when used by humans.** The general lack of knowledge concerning the substance, however, has prompted a group of Cornell scientists from three departments to undertake an informal program of exploratory research.

Laboratory research on royal jelly using animals and insects has been conducted at various places for many years, but as far as Cornell scientists know there has been no reliable, conclusive research on the effects of the product on human beings.

An apiary of about 40 colonies has been set aside at Cornell for the production of royal jelly and experiments are under way to determine the best method for obtaining the maximum amount per colony. Royal jelly is collected daily and refrigerated to prevent its deterioration. When a sufficient quantity has been collected it will be divided among interested research workers and preliminary experiments will be started in several fields.

It is anticipated that progress will be slow. As significant information becomes available it will be released without delay.

A country scene.

Beekeeping As a Village Industry in India

by Dr. J. N. Tennent

An Indian family.

IN THE villages of India the visitor from the west finds much to disturb his peace of mind. Poverty is acute and the standard of life is low. The Indian Government is alive to the need to improve the lot of village people.

India has everything she needs for a prosperous agriculture—plenty of rain, sun and soil. What she lacks is modern machinery and modern technologies. The people must be provided with new implements and taught new methods.

The All India Village Industries Association took origin in 1935 and was one of Ghandi's schemes for the improvement of rural life. The more common industries in village life are spinning, dyeing, weaving, tailoring, mat and basket weaving, pottery, carpentry, smithery, metal industries and works of art. Other industries now being encouraged are paper making, oil pressing, gun making and beekeeping. Owing to the poverty of the masses the Association advocates such industries as require little or no capital, need simple equipment, are easy in technique and manufacture a product which will find a ready market.

In the Province of Bombay and elsewhere the pioneer work of the A.I.V.I.A. has been supplemented by the appointment of Village Industries Committees whose special task is to promote cottage industries, and among those chosen for special promotion is beekeeping. Honey in India is obtained mainly from wild bees. In Bombay Province about 84,000 pounds of honey is sold annually which has been collected by bee hunters. People believe that bees cannot be domesticated and do not appreciate that it is better to adopt a method which avoids destruction of bees and honeycomb every year.

In spite of difficulties, the Committee has pursued its course and has established several centers of training. These are in forest regions. There is also a coastal strip which lends itself to beekeeping. From these two zones it is estimated that 2 million colonies of bees would yield about 10 million pounds of honey a year.

The Committee has provided people with hives and the necessary accessories for beekeeping. The cost of bees and equipment is deducted by installments from the money received from the sale of honey. The Committee trains people to supervise the colonies and arranges for the extraction and marketing of the honey.

From a meager beginning in 1947 with 340 colonies and 131 beekeepers, the Center at Mahabaleshwar has now five substations with a total of 1,015 colonies and 365 beekeepers coming from 50 villages. The honey crop rose from 1,019 pounds in 1947 to 12,700 pounds in 1951.

As the work proceeds and more training in theoretical and practical beekeeping is provided, the general standard is rising and more honey per colony is being obtained. Already plans are on foot to open similar centers in other districts. As the number of beekeepers increases so does the demand for bees. Research work is contemplated to try to improve the strain of bee used. Experiments are being carried out to enable the bees to escape the rigors of the monsoon by transporting them to the plains near Poona at that time of the year. Another problem being investigated is the increase of the honey crop by migratory beekeeping. An attempt is being made also to boost honey as a food. Honey in India is regarded mainly as a medicine; indeed it has been used as such in indigenous medicine from ancient times. As a valuable food, honey is almost unknown. Altogether the future seems bright and the prospects are good for the Indian beekeeper.

Scotland

References: Further Upward in Rural India. D. Spencer Hatch. 1938. Why the Village Movement? Kumarappa. 1939.

"Leaping and Swatting" . . .

Sometimes would-be beekeepers get a little overconfident. I have helped with bees from time to time and perhaps coming from a beekeeping family made me feel unafraid of stings. So when my nephew, who has a few colonies, asked me to help one day, I agreed. We inspected the hives without mishap and it was such a nice day and the bees were so quiet that I finally removed my veil in order to be cooler. The grass had grown tall in front of the colonies, so we decided to clip it down with the power mower. We had a fine system with David running the mower and me behind him scooping up the grass as it fell. All went well (there the story should end) but suddenly—zoom! Out in my face came an angry, buzzing mass—and I turned and ran, leaping and swatting. Needless to say, those of the family who saw me haven't let me forget it. It must have been a funny sight. Now I hope I know better!

Adelaide Larson, Illinois

---SHORTS---

In Memoriam

We have received word of the passing of Mrs. H. F. York, Sr., who died on October 10 at the age of 55 after an illness of several months. She is survived by H. F. York, Sr., of the York Bee Company of Jesup, Georgia. Also surviving are one son, Harvey F. York, Jr. and one daughter, Mrs. John A. Bryan of Monterey, California and three grandchildren.

Cooperation . . .

I am a comparative newcomer, this being my fourth year. I have 15 colonies. I have read many of the available books on beekeeping but I soon realized I needed expert and technical advice and teaching. So I attended a Short Course at the Pennsylvania State College. I had a wonderful experience which sent me home confident and enlightened.

When I read that October was honey promotion month with National Honey Week, I assumed all producers would cooperate. What a shock it was to read that probably less than 10 per cent did actually participate. I cannot believe it.

In my own case, I sent for an observation hive, put a colony of bees in it and put it in a grocery store with a honey display in the window and secured information from American Honey Institute.

Many schools welcome a talk on bees. I have done this and found that work in the schools is very enjoyable and does a lot for one's market.

When I read of lack of cooperation among people who depend on the sale of honey for livelihood, who should jump at the chance to share in organized promotional efforts, I cannot refrain from saying that some people just don't know a good thing when it comes along.

Ken Carrick
Roselle, Illinois

Beating the Heat

William Doner of Phoenix writes us about how they beat the heat when the temperature in the daytime is 100 degrees or more. They start out at 11 P. M. and work until dawn with their bees, using five Coleman gasoline lanterns. Mr. Doner adds that one gas lantern is worth more than a dozen kerosene lanterns.

Specifications for Honey Used in Bakers' Formulas

J. A. Johnson, Department of Flour and Feed Milling, Kansas State College, reports in Food Processing magazine for September, 1954, the results of a three-year study which shows that the addition of honey improves acceptance of most bakery foods. The study, besides determining the most acceptable floral type and most desirable amount in the formula, also suggests tentative specifications for honey in bakery products. These are:

1. Label should show grade, floral sources, moisture and color standards.
2. Only USDA grades A and B should be used.
3. Pfund colorimeter reading should not exceed 70 mm.
4. Honey should be heat-treated to retard granulation and enzyme activity.
5. Rules for floral sources to be used in white bread, cakes, etc., are given.

The study also showed that in bread, honey may be used like any other sugar but does not appear to have any outstanding advantages aside from flavor and aroma. In cake honey can be used to replace up to ⅓ of the sucrose. Honey tends to improve moisture retention, decreases crumbliness, and imparts a desirable richness. It also improves cookies and fruit cake.

Poor Practices . . .

1. Keeping bees in boxes or barrels, without movable frames resulting in—

a. Weak colonies due to many swarms.

b. Crooked combs.

c. Queen being kept too long, resulting in many drones, extra swarms, and poor production.

d. Very poor manipulation in trying to locate queens and diseases.

e. Small brood area that cannot be enlarged.

f. Poor quality honey.

g. Killing of bees in many cases to take honey.

2. Keeping old queens in colonies.

3. Permitting bees to swarm at will.

4. Failure to locate diseases, and to destroy diseased colonies.

J. W. Obenshain, Virginia

More Energy for Studies after Effort* . . .

Failing to do a good job on your homework, or not doing it at all because you lack energy and resolve as a result of a hard game or workout, need not be the great problem it often is to so many high school athletes.

That this problem can be solved, at least in part, was demonstrated during a recent testing program conducted by Sports College. A group of 11 high school athletes who were suffering from this problem was placed on a special program of energy replenishment.

Each athlete was given an eight-ounce glass of orange juice in which two teaspoonfuls of honey had been mixed. This was taken as part of the first meal following the hard workout or game. In every case, the athlete claimed the lack of energy problem was greatly decreased and that a short time after the meal they began to feel a noticeable return of energy and pep.

This replenishment factor (orange juice and honey) was selected because orange juice, besides having an alkaline reaction in the body which supplies ammunition to combat the acids developed from muscular fatigue, also contains dextrose. Honey, we have found, is an excellent product for replenishing energy fuel because it contains both glucose and fructose—two quickly assimilated forms of sugar.

The action of this mixture is noticeable because it helps bring up the blood sugar level, which drops during hard physical activity. This is one of the most important reasons why a student finds it difficult to get going on his homework after a hard workout or game; it is impossible to feel energetic if the blood sugar is low.

This is one more reason why we feel honey should always be found on the food shelf of any physically active family.

(Published by Sports College, Toronto, Ontario, Canada.)

* Reprinted from Research Guide, February, 1954.

Editor's Note—While elk hunting in Colorado one fall, I became lost and by the time I found my way back up the mountain to camp, I was completely exhausted. It gave me the opportunity to try orange juice and honey as a replenishment of energy. I personally can vouch that it works!

You Asked for It...

November for the Beginner

by Frank E. McLaughlin

John H. Meursinge
Huntington Park, Calif.

At the end of each honey season each of our hives contain a great many partly filled honey frames. Most of these frames will have from 5 to 50 cells filled with capped honey.

We will have so many partly filled frames in the higher supers that in fall it becomes difficult to cut the colonies down to two or three stories.

How can we force the bees to move this honey to the lower stories?

You could place the frames containing the cells of honey together in some supers, put one of these supers on top of a hive with an inner cover between the hive containing the bees, and the super containing the honey, the hole in the inner cover left open. The cappings on the honey should be broken. The bees will carry the honey down. All supers should be removed from the colonies first, and the inner cover and super with the honey placed directly on top of the hive.

If you are sure all your bees are free from disease, the cappings on the honey can be broken, and the frames set outside where the bees can get to them. They will rob the honey out. But that is a good way to spread disease, so be certain your bees are disease free first.

I am afraid you put supers on your bees too fast. According to your letter, you have several supers on each hive, with scattered cells of honey in them. The second super should not be put on the bees until the first super is nearly full of honey.

O. H. Menke, Troy, Ohio

Please advise on the use of sulfa as a precautionary measure for A.F.B.: What form is best? How much per colony? How much per gallon of sirup? Which is better, fall or spring application, or is some other time better?

We advise the use of the soluble form called sodium sulfathiazole.

On a preventive basis, use ¼ teaspoonful to the colony in a spray of sirup or water or in feed, gallon or less.

Better apply it when there is brood present, in the fall if you wish, most certainly in spring.

Where does the time go? Here it is November—summer is gone and winter is at hand. In my location work in the bee yard is over for another season.

Now is the time to go over your supers and equipment not in use for the winter. Clean, repair, and paint where necessary. Stack the cleaned supers and cover to keep mice and bugs out. Combs should be fumigated with some good fumigant to kill wax moth eggs and larvae. Care should be taken when using any fumigant; directions should be followed closely.

Winter is also a good time to catch up on reading material. Get out those bee journals that were laid aside during the busy season. The beginner should have one or two good books on beekeeping to read and refer to about the problems he had last summer, or will have next summer, with the bees.

When the cold weather comes, the entrance cleats should be in the hive entrances, giving the smallest opening. Top ventilation at the back of the hive should be provided for, as I told you in former articles. This top ventilation serves several purposes. It allows excess moisture to escape during winter months. It also keeps the bees from smothering if the bottom entrance opening becomes clogged with dead bees and debris, or is covered over with ice. Snow covering the entrance will not hurt the bees but the entrance should be kept clear of ice.

Dysentery sometimes causes considerable loss of the bees in winter, especially in the northern states where bees do not have frequent cleansing flights but are confined to the hive for long periods at a time. Dysentery is caused by moisture in the hive, and excessive moisture content in the honey the bees eat.

When cold weather approaches, the bees start preparing. Most of the drones are driven out of the hive. All cracks, crevices, and holes are propolized shut. Propolis is a wonderful material for the bees. When the weather outside gets cold enough, the bees in the hive form a cluster. At first the cluster is more or less loose. As the weather gets colder, the cluster tightens up. The queen is in the center of the cluster at all times. The bees keep the center of the cluster at the temperature they desire. They do this by muscular activity. The cluster changes—the bees outside move in, and the bees inside move out. When they are unable to do this, the bees on the inside of the cluster pass food to the bees on the outside of the cluster.

Science tells us that bees are cold-blooded insects. Therefore they can adjust themselves to different temperatures.

If I have helped some of our beginner beekeepers solve a few of their problems in keeping bees, I am very glad. Beekeeping is a study, and cannot be taught by books alone, but actual experience a person never forgets.

A Happy Thanksgiving to all our readers and their families.

Oscar Wallace Park

1889 - 1954

"To him who in the love of Nature holds
Communion with her visible forms, she speaks
A various language; for his gayer hours
She has a voice of gladness, and a smile,
An eloquence of beauty and she glides
Into his darker musings with a mild
And healing sympathy that steals away
Their sharpness ere he is aware . . ."

Dr. O. W. Park passed away at Ames, Iowa, October 16, 1954. He had suffered a heart attack just two weeks earlier from which he seemed to be making a satisfactory recovery when he died suddenly.

Dr. Park was a world renowned authority on the life habits and activities of honey bees, and had contributed greatly to the improvement of honey-bee stock through the development of disease-resistant lines. For many years he had initiated and directed the apiculture research program which had placed Iowa State College as a top institution in these fields.

Park was born at Concordia, Kansas, January 14, 1889, and was a graduate of their High School in 1908. He taught in the public schools and served as Principal of the Ward School at Concordia until 1914. In 1917, he received a Bachelor of Science degree from Kansas State College, and was Assistant in Zoology at the Kansas Experiment Station until 1918 when he came to Iowa as Assistant in Apiculture for the Iowa Experiment Station. Except for a short stay at the University of Illinois, he remained at Iowa State until his death. Here he was granted a Master of Science degree in 1920 and a Doctor of Philosophy degree in 1924, being recipient of the first degree of that standing granted in the Department of Zoology and Entomology. At the time of his death, he was Professor of Zoology and Entomology.

Dr. Park was a member of Phi Kappa Phi, Sigma Xi, and Gamma Sigma Delta, honorary scholastic, research and agricultural societies, respectively. He was a member of the Iowa Beekeepers' Association, the Iowa Academy of Science, the Entomological Society of America, American Association of University Professors, and American Association for the Advancement of Science. His bibliography appears in American Men of Science, the Naturalists' Directory, Who's Who in Iowa, and Who Knows and What. He was the author of approximately 100 scientific and research publications that appeared in various professional journals and magazines.

Aside from his consuming interest in honey bees, Wallace, as he was known to his associates, gave much time to his hobby of photography, and was a skillful nature photographer. He also was an avid collector of beekeeping literature, having in his possession a valuable and comprehensive library.

It is hoped that his library of beekeeping literature will be made available to the Iowa State College library as a memorial to Dr. Park. Friends and associates are establishing a memorial fund to be used in obtaining additional books and periodicals which will be suitably inscribed in his memory.

Probably no words can better be used with respect to the life of Dr. Park than the first verse from "Thanatopsis" by Bryant, (which appears above) and no words better described his philosophy of life than the last verse which follows:

"So live, that when thy summons comes to join
The innumerable caravan which moves
To that mysterious realm where each shall take
His chamber in the silent hall of death,
Thou go not, like the quarry-slave at night,
Scourged to his dungeon, but, sustained and soothed
By an unfaltering trust, approach thy grave
Like one who wraps the drapery of his couch
About him, and lies down to pleasant dreams."

You Asked for It . . .

John L. Browning, Abingdon, Va.

I have a stand of bees I put in a new hive this spring on foundation and fed them sugar sirup to build combs. They built the combs and then stored some of the sirup in the combs. I put some stick candy in the sirup and it turned the sirup red. The bees took it better than sirup without the candy. Will the stored sirup keep for winter stores?

I decided I would try a few Caucasian and Carniolan queens. Could you give me a reliable address and prices?

The sirup should be all right for winter stores. I do not believe the stick candy that you put in the sirup is too good for the bees, but I am sure you did not put very much in the sirup. Next to honey, pure sugar sirup is the best feed for bees.

You also ask where would be a good place to order Caucasian and Carniolan queens. There are several good breeders advertising in the American Bee Journal. If you have Italian bees now, and you get another breed of queen and put her in a hive in the same yard as the Italian bees, you will find that before long you will not have a pure strain of any kind of bees. They will mix and your result will be a hybrid, which sometimes gets very cross.

Mrs. Lester Thurman, Lincoln, Iowa

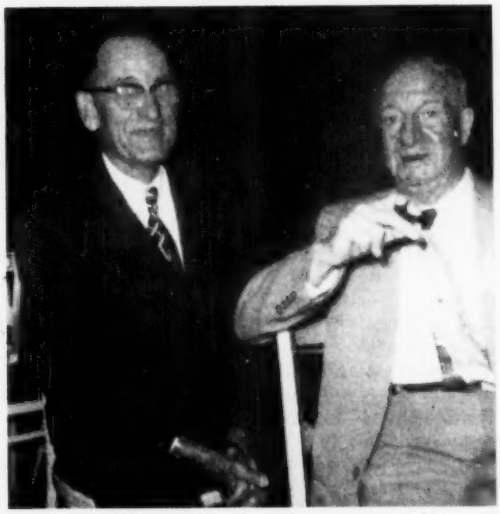
How can one get honey to crystallize or sugar? I have had a jar of honey on a shelf in the kitchen for a year and it has not sugared.

The easiest way I know of to get honey to crystallize is to put two or three spoonfuls of already crystallized honey in a 5 or 10 pound amount of liquid honey, mix it in thoroughly and put it in a container at a temperature of about 57 degrees. Then it tends to crystallize with fair rapidity and if it is kept refrigerated it will stay that way.

From Here and There

Florida

The Two Fosters



Florida's two Fosters. Photo from S. M. Smith. At left, the present apiary inspector; right, former inspector (both named Foster).

Glen H. Bolles pictures the 50-gallon drum used by the Florida Co-op at Umatilla. The drum has succeeded the 5-gallon tin as a container both for wholesale domestic and foreign sales package for honey.

Pioneer Beekeepers to Be Honored at Orlando

Pioneer beekeepers of the South will be honored when the Southern States Beekeepers Federation meets in Orlando, Florida December 1-2.

If you have 50 years' experience with the bees, you are invited to be present as a special guest. Mr. M. G. Dadant, Editor of The American Bee Journal will be master of ceremonies for the occasion.

Other convention highlights will be: Open periods each afternoon for general discussion; an exhibit of beekeeping gadgets, inventions or newly manufactured items; a visit to the Umatilla Honey Co-op plant; a trip through the citrus groves, and most interesting of all, a mammoth honey exhibit from the southern states.

Orange Court Hotel, several blocks from crowded downtown, with reasonable rates and free parking, will be convention headquarters. Hundreds of tourist courts nearby offer convenient quarters for your family. Beautiful flower gardens and parks of this great southern city of hospitality will delight your family.

Bring samples of your honey packs and any handy tools you have invented for your own use. You will find it a profitable and enjoyable vacation.

A. D. Hiett

Colorado

CHAC Votes to Continue Ads at Sept. 13 Meeting

The Colorado Honey Administrative Committee voted to continue newspaper and radio advertising during the 1954-1955 winter marketing season. The amount of money spent on these ads will be determined by the collections made by CHAC. Last year's ads stressed the value of honey for athletes. Skiers were skiing down mountains, mountain climbers were scaling mountains, football players were engaged in a game, people were playing table tennis, and other action scenes were pictured. An attractive plug for honey was given with the picture ads.

* * *

$2,500 to Be Spent For Out-of-State Ads

Since the honey industry is organized under a state marketing agreement, it is eligible for part of the money allotted to advertise Colorado farm products. Approximately $2,500 is being spent to promote Colorado honey outside the state this year. This money will be spent in newspaper ads in the following areas: Amarillo, El Paso, Lubbock, and Ft. Worth, Texas; Phoenix, Arizona; St. Louis, Missouri; Wichita, Kansas; Cheyenne, Wyoming; Albuquerque and Santa Fe, New Mexico; and Oklahoma City, Oklahoma.

South Carolina

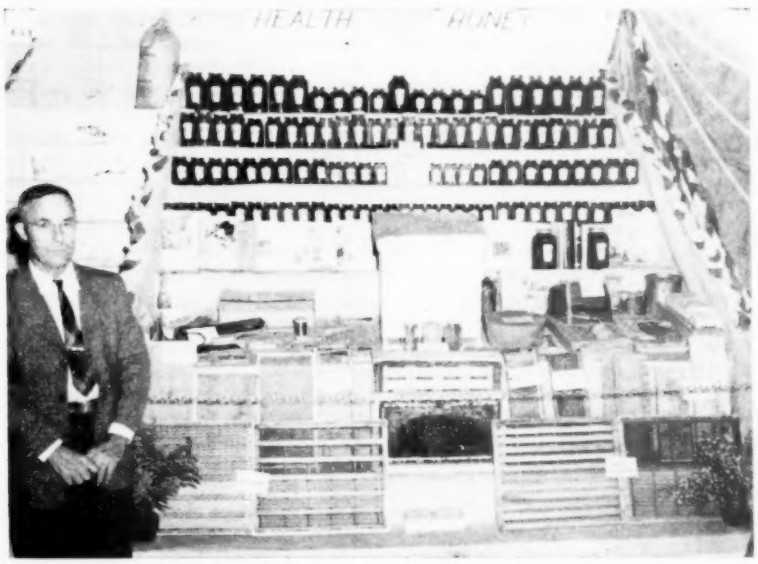


Exhibit of L. J. Jordan, Lancaster, South Carolina, at one of the fairs in Lancaster County. Jordan is one of the country's most skillful exhibitors.

Crimson Clover

W. C. Johnson, Extension Entomologist and Beekeeping Specialist, and W. C. Nettles, in Extension Entomology and Plant Disease Work of the Extension Service of the Clemson Agricultural College (cooperating with USDA) at Clemson, South Carolina, reporting on the value of honey bees in the pollination of crimson clover, find that the honey bee is the one pollinator under the control of either the beekeeper or the farmer that can be moved into a given area in sufficient numbers for good pollination. The bumble bees, andrenids, and megachilids are also good pollinators but they cannot be controlled and clean culture destroys their nesting sites, thus making the use of honey bees more important.

Wire cages of 16-mesh screen to exclude pollinators were placed in the fields of individual farmers before crimson clover came into bloom so there could not be any pollination from outside. At no time during the blooming period were there many bumble bees and few megachilids and andrenids. The clover under the cages remained crimson from 10 days to two weeks longer than the clover in the outside areas, due probably to the lack of visitation from pollinators. Also the clover in the cages grew taller and had a more spindly stem than that in outside areas possibly due in part to the effect of slight shading.

On the farm of J. S. Jones, the pollinated plot showed an increase of 145 pounds per acre over the caged area. At W. O. Noffz's the increase was 200 pounds; at James Wheeler's 356 pounds and at Francis Evans' 149 pounds.

The average yield of all fields without bees was 41 pounds as compared to 212 pounds average for all fields with bees. In view of these gains it would be practical to secure bees for pollination either by rental or ownership because it is evident that honey bees are necessary for the maximum set of seed in crimson clover.

California

Advertising

"This Is Your Fall Honey Advertising Campaign" is a mimeographed pamphlet from the Honey Advisory Board, 417 South Hill St., Los Angeles, 13, for the use of beekeepers during the fall campaign period, October 1-December 15. It shows a honey display poster 13 x 21 inches available to beekeepers, and gives suggestions about how to take part in the advertising program through displays and newspaper advertising.

The Advisory Board, during the campaign period, will use advertising in Sunset magazine, trade magazines, Grocers Advocate, Grocers Journal and in about twenty-two newspapers; and jingle spots over the radio to average 36 times a week over seven stations.

Michigan

State Apiarist Reports Supreme Court's Decision

In reporting this decision, I believe that it is significant, in that many people throughout the country interested in the apiary business were awaiting word regarding this test case. As far as I know or have been able to ascertain, it is only the second Supreme Court decision in any case affecting Apiary Inspection Laws in any state in the Union and the first affecting the importation of bees on comb into a state.

* * *

Michigan Apiary Law Held Valid By Supreme Court

In a recent test case instituted by an Ohio honey producer against the Michigan Department of Agriculture, a decision was filed last week with the State Attorney General. This decision held the Michigan Apiary Law, barring the importation of bees on comb and used beekeeping equipment was constitutional.

The section of the law involved and the Court's decision are as follows:

"It shall be unlawful for any person, firm, corporation or transportation company to bring into this state any bees on combs, used hives or used apiary appliances from any other states or other countries: Provided, however, that common carriers may transport bees and apiary appliances through this state if the shipment originated outside of this state and is destined for some point outside of it.

"In addition to the penalties hereinbefore provided, bees on combs, used hives or other used apiary appliances brought into this state in violation of the provisions of this act shall be confiscated and destroyed."

* * *

Supreme Court's Decision

It clearly appears that inspection of bees and honey involves a different problem than the inspection

of large animals. The act in question does not bar the importation of bees and honey, but bars their importation in combs, and in used hives and equipment.

In our opinion the State, in the exercise of its police power, has the right to regulate the manner by which bees may be imported into Michigan. The requirements under the act are in the interests of public health, and as such are within the constitutional provisions. The decree of the trial court is reversed and the injunction heretofore issued is dissolved.

Don P. Barrett, State Apiarist

Missouri

Combating Soil Moisture Shortage

Missouri Farm News Service suggests a way to reduce water needs in an effort to combat effects of the drouth. This is by reducing plants' demand for water. Perennial plants, such as trees and shrubs have a great seasonal water requirement. It has been established that 300 to 1,000 pounds of water are used for each pound of dry matter produced by fruit trees and that at least 10 times as much moisture is lost by transpiration through the leaves as by direct evaporation from the ground.

In spots where irrigation is not possible or impractical and to reduce water demand, the removal of undesirable trees and heavier pruning are definitely in order. Pruning as a means of conserving moisture is of great value in years when rainfall is much below normal. Trees that have been pruned heavily will have a reduced top in proportion to the root system and what water is available will last longer. Plant removal and heavy pruning is of equal, if not greater, importance in adapting shrubs to drouth. Now is the time to remove some of your poorer shrubs and prune carefully so that water will be conserved. Of course, irrigation will also be necessary in regions of drouth.

Nebraska

Pollinating Alfalfa

Some of the farmers in Nebraska who have rented bees for pollination failed in the past to get any benefits. If this happened it was the beekeeper's fault. In most localities in this state there is a big drop in brood rearing at the end of the main flow, and unless colonies are specially prepared, there are few bees to go to the field at that time of the season. Beekeepers kill the goose that laid the golden egg when they place sparcely populated colonies in an alfalfa field. I have explained to farmers that a colony of bees with a population of 60 to 80,000 bees will pollinate more alfalfa than ten colonies of 15,000 bees each. Sometimes colonies that produced over 200 pounds of honey during the main honeyflow will dwindle down to less than 3 pounds of bees for the fall flow, which would be about the time alfalfa blooms for seed. Alfalfa men should get bees on a basis of seed production above what the average production was without bees. This will incite beekeepers to build up their colony population so that their bees will be of some benefit.

W. L. Nicholson, Nebraska

Honey House in Virginia —

(Continued from page 421)

For years quick yeast formation would happen when the honey was extracted without any application of heat and stored in 60-pound tins. It would even show at the time of extracting in perfectly sealed honey if the honey had been stored shortly after removal from the hives. There have been seasons when fermentation even showed in what appeared to be perfectly sealed chunk comb honey, which had been stored under the most approved condition, a short time after harvest. We think we know why we have an increasing problem on this score. First, the bees we keep today are more highly productive than the strains used in earlier years. The colonies are probably stronger in numbers. They pile in the green nectar in greater volume daily. Then we also place our empty supers underneath the ones being filled. Thus, we constantly push the ripe honey farther and farther away from the heat of the brood nest. This must make it more difficult for the bees to further ripen the nectar. Also it may so disturb their order of activity through this unnatural dispersal of the honey they have been working on, that they are unable to give it adequate attention in final ripening. However, with a maximum crop in mind, we would be unwilling to omit this manipulation.

Last spring we purchased 10,000 pounds of presumably fancy white honey from a Michigan source. We expected this honey to nicely supplement our own crop which was not quite adequate to supply our market. This honey was honestly represented, and we had no reason to complain to the shipper, except for this one matter. When the honey was liquefied and processed as usual through our equipment, we were never able to completely strain out the accumulated yeast, though the honey passed through nine straining operations, including two of 120 mesh cloths. In addition, yeast development in the honey while in storage had progressed to a point where the honey was a light amber at best when packed, with a nondescript flavor, and a cloudiness that could only be explained by the presence of foam which did not clarify out of the honey.

This lot of honey should have graded as fancy as the finest we had and our conclusion is that it had deteriorated two or three grades down in scale in storage simply because it had not been heated and well strained at the time of extracting.

Our own honey was superior in flavor and quality though of the same crop and probably not quite as good as when both honeys were fresh.

The equipment illustrated in picture No. 2, and described in Department No. 2, has, on the basis of three years' operation, completely freed us of this harrowing problem of fermentation in all of its aspects —in our stored honey after extraction, and in our finished pack, after bottling. We have no blending problem, but we could adapt this system to blending by adding the honey either in the warming pan or in the first reservoir tank. If we do not want to process the honey completely in the flash heater while extracting, we can disconnect the second pump and can the honey from the reservoir tank.

In this same department, we also operate our capping melter, using an improvised unit devised from a discarded honey tank, cut in half, into which has been fitted a copper coil. A baffle has been soldered inside the tank so as to enable the honey to flow from its floor up and out one outlet, and the wax flows from the top of the container through another outlet. This unit economically handles our cappings and will melt the cappings from a 10,000 pound extracting operation in one day's time.

(To be continued in December)

LET'S GET TOGETHER

Southern States Beekeepers Federation and Florida State Association

Orlando, Florida, December 1-2, 1954

Registration and meeting rooms will be at the Orange Court Hotel which has been designated as official headquarters. The Florida Association is serving as host to the Federation.

PROGRAM

Twenty-sixth Annual Meeting

Wednesday, December 1—

8:30 A. M. Registration

9:30 A. M. Call to Order—President A. D. Hiett presiding, Martinsburg, West Virginia; invocation—Reverend Russell A. Martin, Orlando, Florida

9:45 A. M. Welcome—Honorable J. Rolfe Davis, Mayor, City of Orlando

9:55 A. M. Response—(to be announced); Roll Call by states

10:00 A. M. Presidential Address—President A. D. Hiett

10:30 A. M. How the Honey Price Support Program Benefits the Beekeeper—Mr. Harold J. Clay, U. S. Department of Agriculture.

11:00 A. M. Results of Twelve Years Research with Bee Stings on Arthritis and Neuritis—Professor F. E. Guyton, Entomology Department, Alabama Polytechnic Institute.

11:30 A. M. Preliminary Business Sessions and Appointment of Committees: Southern States Beekeepers' Federation, Florida State Beekeepers' Association, Florida Honey Packers' Association.

12:00 Noon Recess.

1:30 P. M. Call to Order—Vice President Lynn M. Dewey, Merritt Island, Florida. Recognition of Representatives of Bee Journals and Equipment and Supply Companies.

2:45 P. M. Royal Jelly and Human Nutrition—Dr. Ouida D. Abbott, Head, Home Economics Department, University of Florida.

3:15 P. M. Open Discussion Period —Mr. A. V. Dowling, Leader, Valdosta, Georgia.

4:30 P. M. Adjournment.

Thursday, December 2—

9:00 A. M. Call to Order—Mr. A. D. Hiett, President. Introduction of Special Guests and Visitors; announcements.

9:10 A. M. Attracting and Selling the Customer—Mr. Jonathan D. Clement, Southern Regional Merchandising Manager, Owens-Illinois Company, Atlanta, Georgia.

9:40 A. M. The American Honey Institute and Southern Beekeeping—Mrs. Harriett M. Grace, Director, American Honey Institute.

10:10 A. M. Nectar Production by White Clover and Sweet Clover Blossoms—Dr. Everett A. Oertel, Southern States Beekeeping Laboratory, Baton Rouge.

10:40 A. M. Florida's Nectar and Pollen Plant Introduction Program —Dr. F. A. Robinson, Assistant Apiculturist, Florida Agricultural Experiment Station, Gainesville.

11:00 A. M. Panel Discussion, Bulk Comb Honey Packing and Marketing—Mr. Leslie M. Lewis, Panel Leader, Havana, Florida. (Other panel members to be announced).

12:00 Noon Recess.

1:30 P. M. Call to Order—President A. D. Hiett.

1:35 P. M. The 1954 Activities of the American Beekeeping Federation —H. A. Schaefer, President, American Beekeeping Federation.

2:00 P. M. The Florida Honey Cooperative — Mr. D. E. Sojourner, President, Florida Honey Cooperative.

2:20 P. M. A Commercial Honey Producer Looks at the Honey Cooperative—Mr. Byron F. Freeman, Thonotosassa, Florida.

2:30 P. M. What the Cooperative Means to the Small Honey Producer —Mr. C. A. Connell, Winter Garden, Florida.

2:40 P. M. Ideas on Honey Selling —Mr. Roy E. Novinger, President Florida Beekeepers' Association, Oxford, Florida.

2:50 P. M. Final Business Meetings: Southern States Beekeepers' Federation, Florida State Beekeepers' Association, Florida Honey Packers' Association; committee reports; election of officers; installation of new officers; selection of 1955 meeting place.

4:00 P. M. Open Discussion Period —Leader to be announced.

5:00 P. M. Final Adjournment.

For those who arrive early Professor John D. Haynie, State Extension Apiculturist of Florida will show some interesting films and color slides bearing on Florida beekeeping after supper on Tuesday, November 30 at the Orange Court Hotel.

One of the special features of the convention will be the banquet at which Maurice Dadant will serve as toastmaster. A HONEY QUEEN is to be presented. The oldsters among the beekeepers of the southern states are to be featured and feted. Other banquet activities include the presentation of several certificates by the Florida Beekeepers' Association.

The management of the Florida Honey Cooperative will conduct a tour of its honey packing plant at Umatilla.

Don't forget the big honey show! In connection with this will be a mammoth auction of honey and other beekeeping items, proceeds of which are to go to the American Honey Institute.

David Dunavan,
Clemson, South Carolina
Chairman, Program Committee

Westchester Co. Beekeepers Assoc. New Rochelle, N. Y., Nov. 21

The Westchester County Beekeepers Association will hold its next meeting Sunday, November 21 at 2:30 P. M. at the Odd Fellows Hall, 20 Lockwood Ave., New Rochelle, N. Y. A fine program has been arranged so all members and friends are urged to be present.

Carlton E. Slater, Publicity

Montana State Beekeepers Assoc. Lewistown, Dec. 3 and 4

The Montana State Beekeepers Assoc. will hold its 34th annual meeting on December 3 and 4 at the Burke Hotel in Lewistown. Free distribution of Montana honey to restaurants and hotels, to be served to all customers during the convention will be furnished by the beekeepers. An exhibit of equipment used by beemen to make their work easier will be on display.

Mrs. O. R. Burdett, Sec'y

(Please turn to next page)

Middlesex Co. Beekeepers Assoc.
Waltham, Mass., Nov. 27

The next meeting of the Middlesex County Beekeepers' Association (Mass.) is scheduled for Saturday, November 27, at the Waltham Field Station. At this meeting we will resume our practice of having a "pot luck supper" before the business meeting. These suppers have become very popular with the members.

Our fall season got off to a splendid start with a banquet held on Saturday, October 30. The banquet was again catered by "Hicks" and an excellent meal was enjoyed by everyone. A vote of thanks was given to Mr. R. W. Corrigan who was in charge of arrangements for this meeting.

L. C. Proctor, Secretary

Annual Convention
Manitoba Beekeepers Association

The annual convention of the Manitoba Beekeepers Association will be held at the Airport Hotel in Winnipeg on Monday and Tuesday, November 15 and 16.

D. R. Robertson, Sec'y

Annual Meeting
American Bee Breeders Assoc.

The annual meeting of the American Bee Breeders Association has been tentatively set for January 8, 1955 at the Forrest Hotel in Hattiesburg, Miss. Make your plans to attend. An invitation is extended to all beekeepers. Further details and program schedule will be announced in the December bee journals. All package men and queen breeders please notice.

Southern Tier Beekeepers Assoc.
Binghamton, N. Y., Nov. 9

The Southern Tier Beekeepers Association will meet on November 9 at the C. L. Reynolds Radio and Appliance salesroom, 25-27 Stirges St., Binghamton, N. Y. Election of officers will be held and a picture will be shown. A light lunch will be served. Everyone interested in beekeeping is sincerely invited to attend.

H. B. Webb, Sec'y

Washington State Convention
Wenatchee, Nov. 30-Dec. 1

The Washington State Beekeepers Convention will be held at Wenatchee on Tuesday and Wednesday, November 30 and December 1. There will be a board meeting the evening of November 29 and registration for the convention will be at 9 A.M. on the 30th.

Mrs. Carl W. Van Wechel, Sec'y

Program
Sixty-Fourth Annual Convention,
Illinois State Beekeepers Association,
St. Nicholas Hotel, Springfield,
Nov. 5-6

November 5—

9 a. m.—Call to order by the President. An hour will be allotted to registration, payment of dues, meeting our old and new friends and getting settled to convention business.

10 a. m.—Business meeting. Reading of the minutes of the last meeting. Appointment of committees. President's address, Mr. Ralph Bessey. Secretary's Report, Hoyt Taylor. Treasurer's Report, Mr. Leroy Stockdale. Report of Chief Inspector of Apiaries, Mr. Carl E. Killion. Reports of any committees, discussion of reports.

11 a. m.—"Our Work With Illinois Beekeepers," Andrew A. Ormiston, Asst. to the Director and Davis Foreman, Supt. Division of Markets, State of Illinois.

11:30 a. m.—American Federation Representative, Mr. Robert Banker or H. A. Schaefer, "What the Federation Means to the Individual Beekeeper."

12 Noon—Lunch.

1:30 p. m.—"What the Trade and Consumers Think of Honey," Roy Grout of Dadant and Sons, Inc., Hamilton, Illinois.

2:30 p. m.—"Consumers Fix The Prices," I. E. Parett, Illinois Agricultural Association, Chicago, Illinois.

3:30 p. m.—Recess.

3:45 p. m.—"Our Future in Honey Marketing," Walter Barth, A. I. Root Co., Medina, Ohio.

4:45 p. m.—"Best Way for the Small Beekeeper to Market His Crop," Art Kehl, G. B. Lewis Co., Watertown, Wisconsin.

6:30 p. m.—Banquet at St. Nicholas Hotel. American Honey Institute representative and others may give informal reviews on their work and plans.

November 6—

9:30 a. m.—Business meeting. Report of Auditing Committee. Report of Resolution Committee. Election and installation of officers. Finish old business.

10:30 a. m.—Address by Hon. Stillman J. Stanard, Director of Agriculture, State of Illinois.

11:15 a. m.—"Let's Consider Fundamentals," Dr. V. G. Milum, University of Illinois.

12 Noon—Lunch.

1 p. m.—"My Work with Illinois Beekeepers," Carl E. Killion, Chief Inspector of Apiaries, State of Illinois.

2 p. m.—"Beekeeping in Ancient Times," Geo. C. Nagel, of Geo. C. Nagel Associates, Counselors in Advertising, Clayton 5, Mo.

2:30 p. m.—Finish old business, discussion and adjournment.

Michigan Annual
East Lansing, Dec. 11

The annual business meeting of the Michigan Beekeepers Association will be held on Saturday, December 11, in Room 33 of the Union Building at Michigan State College, East Lansing. The meeting will begin at 10 a. m. Items of business important to all beekeepers will be on the agenda. All beekeepers are invited to attend.

E. C. Martin, Program Committee

Iowa Annual
Ames, Nov. 17-18

The annual meeting of the Iowa Beekeepers Association will be held at Ames on November 17 and 18 in conjunction with other affiliated organizations of the State Horticultural Society. The first day will carry two topics of the panel type discussion on the hybrid bee and what the future holds. Speakers of national position will occupy the first half of the second day and the second half will be devoted to a business session. Anyone who is interested in beekeeping is invited to attend these sessions.

F. B. Paddock, Extension Apiarist

Ontario Beekeepers' Association
Seventy-Fifth Annual Convention

The Seventy-Fifth Annual Meeting of the Ontario Beekeepers' Association will be celebrated at the King Edward Hotel in Toronto on November 29 and 30 and December 1. This is an historic occasion and the programme is being arranged accordingly. Displays of honey and beekeepers' supplies are being accommodated in special rooms.

The programme will include many prominent speakers, such as Mr. J. I. Hambleton, Dr. William Coggshall, Dr. W. E. Dunham, Dr. C. A. Jamieson and others. One of the highlights of the meeting will be a banquet on the evening of November 30. All those planning on attending should advise the Secretary, Ontario Beekeepers' Association, Ontario Agricultural College, Guelph, Ontario, as soon as possible.

Few, if any, beekeeping organizations can boast of having completed seventy-five annual meetings with-

out a break. The history of Canadian beekeeping and much of the early American history is closely tied to the Onatrio association. It is expected that many from far and near will be on hand to join in celebrating this historic occasion.

G. F. Townsend, Sec'y

Minnesota Annual
St. Paul, Dec. 4

The Minnesota Beekeepers Association will hold its annual meeting on December 4 at the St. Francis Hotel in St. Paul. A group luncheon will be held at noon and the banquet will be the evening of the 4th. Out-of-state speakers are expected and election of officers and federation directors will take place at this meeting. Anyone interested in beekeeping is invited.

Robert Banker, Sec'y

Annual Convention
California State Beekeepers Assoc.
Bakersfield, Dec. 7, 8, 9

Bakersfield, Calif., has been selected as the convention city for the annual meeting of the California State Beekeepers Association to be held on December 7, 8 and 9 at the Hotel el Tejon. The program will be centered around the main problems of the industry, and panels of experienced beekeepers and speakers will discuss pollination, marketing, pesticide programs, desired changes in bee laws and problems of colony and apiary management. A feature of the convention will be a panel discussion on the evening of December 7 in which seed, cotton, pesticide and beekeeping interests will take part. This will be an open meeting for all growers, pesticide interests and beekeepers.

J. E. Eckert, Apiculturist

The Market Place . . .

FOR SALE

HAVE FOR SALE and WANT TO BUY—Used extractors of all kinds. John Layman, 702 West 6th St., Bloomington, Ind.

FOR SALE—65 10-fr. hives bees with 4 extracting supers. E. A. Quivey, Bowen, Ill.

FOR SALE—750 colonies 10-frame 2-stories bees at $10.50 each at yard. Location fine for package and queen rearing and honey. W. A. Wiley, West Point, Miss.

FOR SALE — Equipment for 50 colonies, 15 inspected double brood colonies with winter stores. 45 Simplicity extractor, melter, uncapping machine, accessories. Excellent condition. Price reasonable. A. G. Ostermoor, Holmes, N. Y.

FOR SALE — 1000 8-frame supers with frames. Very good condition. Sterilized. E. H. Wadleigh, Monte Vista, Colo.

FOR SALE—Complete bee business. 800 3-story standard 10-frame dove-tailed colonies. A-1 equipment inside and out. For details and price write Kollman Bros., Gen. Del., Grimes, Calif.

HONEY and BEESWAX WANTED

HONEY WANTED—All grades and varieties. Highest cash prices paid. Mail samples. State quantity. HAMILTON & COMPANY, 2613 South Yates Ave., Los Angeles 22, Calif.

WILL BUY two carloads fancy white honey. Send sample and quote. Maxwell's, Berryville, Va.

WANTED — Dark honey, small or large quantities. R. L. Griggs, Hancock, Iowa.

HONEY AND BEESWAX WANTED in trade for supplies or cash. Hodgson Bee Supplies Ltd., 565—13th Ave., New Westminster, B. C., Canada.

WANTED — Extracted honey, white or light amber, in 60's. State price in first letter. Ed. Heldt, 1004 W. Washington St., Bloomington, Illinois.

WANTED—Honey, amber or light, in any amount. Send sample for prices. Holland Honey Cake Co., Holland, Mich.

HONEY WANTED — Highest prices paid. Submit samples in each grade. Schultz Honey Farms, Ripon, Wis.
CASH PAID for light colored honey. Paul Oblack, Loyal, Wis.

WRITE FOR SHIPPING TAGS and current quotations on rendered beeswax. Any amount from one pound up bought. If you have 25 pounds or more, save 25% by letting us work it into foundation for you. Walter T. Kelley Co., Clarkson, Kentucky.

CASH PAID for white and amber extracted honey. Send samples and state quantity available. Prairie View Honey Co., 12303 Twelfth St., Detroit 6, Mich.

WANTED—Extra white and light amber honey. Let us ship you the containers. Sell us your honey for CASH on delivery. The Hubbard Apiaries, Manufacturers of Bee Supplies and Comb Foundation, Onsted, Michigan.

HONEY WANTED for cash. All grades. Good used cans for sale or trade for honey. John Tideswell, 2711 North 63 St., Omaha, Nebr.

WE ARE PAYING top prices on beeswax shipped to one of our plants. Sioux Honey Association, Lima, Ohio; Rogers, Texas; Anaheim, California; Tacoma, Washington, and Sioux City, Iowa.

WANTED — White and amber extracted honey, carloads or less. Write stating best price. Honeymoon Prod. Co., 39 E. Henry St., River Rouge, Mich.

HOREHOUND HONEY in 60's. Send sample, state price. Thomas Martindale Co., 25 N. Tenth St., Philadelphia 7, Pa.

HONEY WANTED in 60's. Send sample and price. John Harnack & Son, McGregor, Iowa.

HONEY FOR SALE

LIGHT CLOVER honey, 60's, $10.20; 10 or more, $9.90 each. Harris Bee Supply, Jackson, Tenn.

WHITE CLOVER HONEY in sixties. Ralph Gamber, 910 State, Lancaster, Pa.

POSITIONS AND HELP WANTED

WANTED — To buy or lease apiary or work on share. Box 6, c/o American Bee Journal.

HONEY LABELS
Improved designs, embodying color, balance, simplicity, and distinction.
Please send for free samples & prices.
C. W. AEPPLER COMPANY
Oconomowoc, Wisconsin

WRITE FOR CATALOGUE. Quality bee supplies at factory prices. Prompt shipment. Satisfaction guaranteed. The Hubbard Apiaries, Manufacturers of Beekeepers' Supplies, Onsted, Michigan.

HELP WANTED for 1955 — Give experience, references, age and height. Do not apply if you drink. Also, bees on share basis to right party. Howard Weaver, Navasota, Texas.

WANTED—Beekeeper. Care for 1500 hives of bees coming season. Write Flying "B" Honey Co., Box 268, Delta, Colo.

THE BIGGEST BEE SUPPLY CATALOGUE PUBLISHED (64 pages) free for the asking. Big factory manufacturing a complete line of wooden goods, comb foundation, metal goods, veils and gloves, carloads in stock, daily shipments, save 20%. WALTER T. KELLEY CO., CLARKSON, KENTUCKY.

SUPPLIES

BEE SUPPLIES—Tin packages, 10 sizes glass jars, paper shipping supplies, window cartons and other items. Roscoe F. Wixson, Dundee, N. Y.

WANTED

WISH to rent or buy 10-frame equipment with some drawn combs and comb honey supers. Lee Morrill, Madison, S. D.

WOULD LIKE TO BUY equipment to operate 500 to 1000 colonies of bees. Nornes & Crowser, Hendricks, Minn.

WISH TO BUY a large number of ten-frame full depth supers with comb. Box WH; c/o American Bee Journal.

SEEDS AND TREES

HONEY PLANTS our specialty. Catalogue on request. Pellett Gardens, Atlantic, Iowa.

MISCELLANEOUS

RANCH MAGAZINE—Do you find it difficult to secure information about sheep and sheep ranching methods? The SHEEP AND GOAT RAISER reaches more sheepmen with more information of range sheep than any magazine published. Subscription $1.00. Hotel Cactus, San Angelo, Texas.

MAKE EXTRA MONEY. Address, mail post cards spare time every week. BICO, 143 Belmont, Belmont, Mass.

TESTED FORMULA for a new kind light pure bee honey which makes it much different in taste and aroma and far superior in health quality. This improved honey has a new and strong sales appeal. Exclusive rights to formula and all sales territory east or west of Mississippi River. Price, $950. R. Linse, 5518 North 6, Philadelphia, Pa.

BEES removed from house or tree to hive without touching either house or bees. Bees will then move honey into hive. Save property, honey and bees with my method. Send $2 for details. Satisfaction guaranteed. George Hawkins, Rt. 1, Lawson, Mo.

KNOW interesting facts about the bees of India through the INDIAN BEE JOURNAL, published in English by the Bhupen Apiaries (Himalayas), Ramgarth, Dist. Nainital, U.P., India, and obtainable from them. Subs. Rs9/-, or S.15/-, or $2.25 yearly. Sample copy, post free, Rs.1/8/-, or S.2/6 or 40c (International money order). Payment in mint postage stamps of your country accepted.

CROPS AND MARKETS

M. G. DADANT

On the whole, the condition of bees throughout the United States is from fair to good to very good with only a few sections showing extremely poor condition, which have resulted from no crop and no possibility of fall crop to build the bees up. Northeastern New York, New Hampshire and Maine are all in this category. Some sections of Wisconsin are similar and some sections of Kansas, all apparently from shortage of rainfall to induce nectar secretion.

There are, however, a great many sections of states and individual localities where the later summer and fall flows also have missed and as a consequence bees are not going into winter quarters with as much stores as they should have. In some cases, late rains did induce a fall flow as has been the case in East Texas but on the whole, the fall flows were disappointing and in many cases did not fill the brood nests let alone give a surplus.

The recent report of the United States Department of Agriculture would indicate that the honey crop this year is 5% below 1953 which in itself was considerably under the heavy 1952 crop. The heavier producing sections, they report, are the Southeast and the West including the states of California, Idaho, and Utah. It is our individual opinion perhaps they have based too low. The Dakotas have fared extremely well in crops this year, somewhat compensating for the shorter crop in Colorado and Montana. Also late summer flows in some of the alfalfa sections have helped boost the total. However, their reports are from 8,000 beekeepers which gives a pretty good general survey.

How Is Honey Selling

On the whole, honey sales when the honey is available are from good to very good. This, we believe, we can report for the entire country. No doubt in the short crop sections beekeepers individually and smaller packers are not encouraged to make efforts for heavy sales in view of short supply of honey.

Prices

On the whole, prices will range just about as a year ago with the price on bulk comb ranging from 40c to 50c for the pound jar to $1.75 to $2.00 for the 5 pound jar or pail.

As usual in extracted honey, prices are highest in the East, tapering off as we go westward. Eastern prices would indicate 40c for the single pound and $1.50 for 5 pound pail. There are retail prices. As we work into the central West, the price would drop to 35 cents for one pound and $1.15 to $1.40 for the 5 pound pail. Some quotations in the plains area indicate a 30c price with $1.09 for 5 pound pails. No lower prices than this are indicated in the plains territory and a somewhat higher price for the coast.

On the whole, comb honey is retailing from 50c to 60c a section although some quotations are somewhat less.

Seems not too difficult to sell bulk extracted honey in quantities at 12c a pound for white and perhaps 11c for amber and some sales have been made as high as 14c a pound. We learn of one shipment to Canada at a price of 15c. All these prices are f.o.b. producer's point and in many cases are shaded upward by "can returns."

There have, however, been lower prices for honey and some quotations in the intermountains are still 11 to 11½c for white with about 1c less for amber honey. This quotation seems somewhat under a satisfactory basis in view of the very short carry-over and a comparatively short crop this year.

Added to this there have been some 30 million pounds of honey removed from the American market through exports abroad or contracted exports to go abroad. In fact, the Production and Marketing Administration saw fit to remove the export subsidy quite early in view of the comparatively short crop and apparent ease with which this year's crop might be distributed domestically.

Very little honey has been placed under loan and apparently very little will be in view of the fact that the selling price of honey now appears to hold up above the loan figures.

Some of our reporters are indicating that apparently California had disposed of so much honey on the export market that there will be no difficulty in clearing up what honey is left on the Coast.

There is no doubt but that the efforts made by the California, Colorado, Idaho and other state marketing organizations have had their effect although in general we do not believe there has been the effort made to publicize and boost honey during the fall of 1954 that there was a year ago, perhaps because the Production and Marketing Administration has not been quite so active.

Summary

In any case, it appears that about the same number of bees will go into winter quarters as a year ago, that they will be in about as good shape except perhaps for the need of winter stores and the necessity for feeding.

Apparently the crop is at least no larger than last year, very much spotted and sufficient of the surplus honey has been drained off by export to warrant good prices and easy sale for the balance of the crop before a new season hits.

While rainfall has been decidedly better in the northern half of the country and in some cases in southern areas there are still drought areas. Long range forecasts seem to indicate that such droughts may last into the 1955 season.